E HARSHAW INTELLIGE

SINCE 1915 • THE NATIONAL MAGAZINE FOR PURCHASING AGENTS

URCHASING

Lee Bussmann

see page 21

Vol.



PRODUCTS OF NILES STEEL PRODUCTS **DIVISION THAT YOU SHOULD KNOW ABOUT**

A complete line of shipping containers-including pails, pour-spout pails and drums, full removable head light gauge drums and a full line of one-time shipper steel barrels-plain, lithographed, printed and with special lacquer coatings. Stampings and pressed steel parts for every purpose.

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IT MAKES INK FLOW UPHILL

A typical example of Goodrich development in rubber

NOW it's empty; now it's full. Just push the pen down and release, without even touching the regular filling mechanism. Ink can't spill, even if the device is turned upside down for a second or two.

A manufacturer invented this novel pen filler that makes ink flow uphill. Because it is so small and so positive in action, parts have to be made with unusual precision. Also, the entire device must be light in weight. Rubber was the only material which answered all requirements but soft rubber won't stand the action of certain inks. Could the parts be made of hard rubber? Could hard rubber be molded with sufficient preci-

sion? The success of the entire invention depended on rubber engineering.

The manufacturer came to Goodrich, and Goodrich technical men went to work. A hard rubber compound was developed which will stand any ink, last indefinitely, and can be molded with such precision that even tiny rubber parts fit each other exactly. The pen filler was put on the market—and became an immediate success.

Whether you have a new product which calls for special rubber or whether you use rubber only in familiar products—such as transmission belting, conveyor belting, packing and hose—it will pay you well to specify Goodrich. The

research here which never stops has developed one rubber which has multiplied the flexing life of belts 5 times; another which in many uses withstands abrasion better than steel; other rubbers which resist acids, alkalies and oils; still others which can be made in almost any color, form and texture. The benefits of all this research and improvement are yours every time you specify *Goodrich* to your distributor. The B. F. Goodrich Company, Mechanical Rubber Goods Division, Akron, Ohio.

Goodrich



Consolidated with "The Executive Purchaser"

PURCHASING is an independent journal, not the official organ of any association. It is the only publication of national scope devoted exclusively to the interests and problems of the purchasing executive in industry and government.

Yours on Request .

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Purchasing agents find that Long Distance enables them to make the most detailed inquiries . . . to secure favorable prices and deliveries. They use the telephone in price and service buying to build and to keep cordial relationships.

• Tributes to the value of Long Distance are frequent from purchasing agents in varied businesses. There are ample reasons why. Long Distance is rapid . . . direct . . . diplomatic . . . in every sense a "good-will ambassador." And cheaper than ever at the present reduced rates.

Yours on Request

Purchasing agents will find it well worth their while to read the publications reviewed on this and the following pages. From among the many submitted to us, they have been selected by the editors as having greatest interest and utility value to purchasing agents.

To obtain copies, simply fill in and mail coupon at the bottom of this page.

- The "Speed-Mo" line of modern marking devices and office and factory specialties—used by purchasing agents for hundreds of large companies—is shown in the title shows the constraint of the shown in the companies—is shown in the companies—is shown in the started are a unique and comprehensive variety of stamp pads, fountain brushes, rotary daters, time stamps, line daters, line numberers, tray files, moisteners, punches, etc.
- A vivid colorful new 8-page, $8^{1}/2^{\circ}$ x 11" catalog, released by Victor Electric Products, Inc., illustrates the complete 1938 line of Victor "Miracle Breeze" Fans, which offer the unusual feature of cooling comfort without draft or blasts. A number of models for use on desk, floor and ceiling are shown, in addition to exhaust fans, ventilators and automatic shutters. Detailed descriptions are accompanied by complete specifications.
- "Catalog Binder Service," a 24-page booklet published by National Blank Book Co., describes various types of special binders available for manufacturers' or wholesalers' loose-leaf catalogs, also covers preliminary considerations in selection of a binder mechanism in considerable detail. Numerous types of bindings are represented, each adapted to a special set of service requirements, such as frequent sheet changing, outdoor use, compactness, inclusion with sales portfolio, etc. Special designs in such covers are made to order.
- 345. The B. F. Goodrich Co.'s 1938 replacement line of single-groove fractional horsepower V-belts is completely described in two important references, the V-Belt Data Book and the V-Belt Conversion List. By referring to the 138-page V-Belt Data Book, purchasing agents can determine the number, size and price of a Goodrich replacement V-belt for numerous leading makes of water pumps, wood-working machines, stokers, oil burners, air compressors, refrigerators, buffing machines, gasoline pumps and other machines. The 16-page V-Belt Conversion List enables the "P.A." to find a Goodrich belt that can be interchanged with a belt of another make.
- One of the most voluminous wholesale merchandise catalogs ever issued is Joseph Hagn Co.'s 640-page 1938 Jewelry and Gift Book. In addition to diamonds, watches, jewelry and silverware, this book also shows a large selection of furniture, apparel for men and women, toys, electric appliances, leather goods, luggage, prizes, premiums, etc., including many nationally advertised items.
- A revised edition of "How to Choose A Diamond," offering much information of interest and value to the layman, has been issued by L. & C. Mayers Co. This new 16-page booklet recounts briefly the modern history of diamonds from the inception of the industry in South Africa in 1866. Avoiding technical language, it analyzes the various phases of diamond production and contains advice on the selection of diamonds.
- PURCHASING, 11 West 42nd St., New York, N. Y.
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Numbers:

Name

Company

Address

City.....State

- **372.** Coal and fuel oil analyses, meter and instrument checking, electrical trouble-shooting, indicator cards on engines and compressors are among the "Laboratory Services" for Industrial Plants and Building Owners and Operators" described in an Electrical Testing Laboratories' pamphlet. Facilities are also available for testing commodities purchased in quantities, such as paper, soap, lamps, dry cells, lubricating oils, etc.
- 373. Actual installation photos in industrial plants and federal, state and municipal projects are shown in a colorful 4-page folder devoted to Kron springless dial scales for batching concrete, asphalt, abrasives, glass, chemicals, foundry charges, cosmetics, drugs, etc.
- 374. Described as a perfect soap system for business or public washrooms, Soapitor, which dispenses powdered soap from a solid cake, is the subject of a 4-page folder issued by Soapitor Co., Inc., An interesting feature of this 8½" x 11" folder is a table of comparison of soaps.
- The new handy pocket-size 224-page Ryerson Stock List, recently issued, gives complete listing and descriptions of the wide range of Certified Steels and allied products carried in stock by Joseph T. Ryerson & Son, Inc. Included are handy reference tables, weight charts, standard specification listings, etc. Among the products represented are beams, channels, angles, plates, bars, bands, hoops, cold finished bars, alloys, tool steel, sheets, flat wire, stainless, tubes, copper, brass, babbitt, bearings, welding rod and wire, bolts, rivets, metal working machinery, tools.
- **377.** Considerable enlightenment on the numerous and diversified facilities offered business by Railway Express Agency, Inc., is furnished in a strikingly illustrated 24-page booklet entitled "Helpful Services of Railway Express."
- How to brace car shipments of many products including motors, roofing, barrels, paper, oil drums, crates, hot water tanks, etc., is photographically explained in a 24-page 8½ x 11″ booklet describing the Stanley Car Banding System. Issued by the Steel Strapping Division of The Stanley Works, this booklet also illustrates all the tools and accessories required for car banding. Actual savings on freight charges plus lower bracing costs and elimination of damage are claimed for this car banding system.
- A new rust-resisting scale developed by Triner Sales Co. is described in detail in a circular just issued. It should be of special interest to packing houses and food products manufacturers requiring the weighing of fresh meats, butter, cheese, ice cream, milk, fish, etc. Also to laundries and many other establishments where scales are subjected to water, salt, brine and acids.
- The advantages of the Plymco Air Filter for air cleaning installations in industrial plants, public buildings, stores, hotels, steamship lines, theatres and railroads are described in an informative folder issued by Plymouth Cordage Co. Using rope fibers as a filtering medium, this product has exceptional dust-holding capacity.
- Equipped to build hoists from the standard gate to the colossal roller gate type, and gates from small sluice to massive roller gates, S. Morgan Smith Co. has issued a handsome new color booklet devoted to these products. The 32 pages of this publication, Bulletin No. 137, are replete with large striking photographs of actual installations, etc.
- A current price bulletin on cotton wiping cloths, cotton waste and cheese cloths is available from Globe Cotton Mills. "P. A's" requesting this bulletin will be placed on mailing list to receive similar bulletins to be issued regularly in the future.

(Additional listings on pages 6, 8)



STEEL Ruys American "Superior" Manila Rope for its Toughest Rope Jobs



There's a lot of rope work in a big steel mill, and it's tough as the men who do it. That's why so many purchasing agents specify America's "Superior" Manila Rope. They know its pure manila fibre, its careful construction, its great tensile strength can handle the heat and the rough treatment that a rope must stand wherever industry is served.

Western Factory Branch: St. Louis Cordage Mills, St. Louis, Mo.

Yours on Request

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To obtain copies, simply fill in and mail coupon at the bottom of this page.

A comprehensive 106-page 8½" x 11" loose-leaf catalog recently issued by Pulmosan Safety Equipment Co. covers virtually all industrial safety equipment requirements. Some of the numerous products illustrated and described are respirators of all types and for all purposes, hoods, helmets, masks, goggles, gloves, welding shields, safety ladder shoes, leggings, aprons, inhalators, fire-fighting equipment, first aid kits and supplies, safety shoes, foot guards, safety belts, salt tablets, etc.

A bulletin offering special prices on rebuilt checkwriting, adding and calculating machines is available from the Check Writer Co., Inc. Nationally known makes are included, all carrying a guarantee of one year.

Samples of labels, stickers and embossed seals in gold, silver and colors are contained in a folder prepared by St. Louis Sticker Co. showing uses for these items in all phases of business practice and advertising. Another folder describes and includes samples of "Protect O Seal," a new transparent sticker used in place of wax to safeguard valuable mail

As an example of its etched and lithographed line of signs, name plates, dials and novelties, Anderson & Sons is offering free 6" metal rules with table of decimal equivalents on the reverse side. Rules are available in both gold and silver finishes.

The new patented Jenkins U-Bolt Gate Valve incorporates many design features which assure reduction of maintenance costs to a minimum, longer service life and greater convenience. Subject of a handsome colorful folder issued by Jenkins Bros., this new valve can be taken apart for cleaning and inspection and put together again in 12 minutes. It has a renewable "Bonnet-Saver-Bushing," which avoids the need for purchasing an entire new bonnet because of worn threads. All design features are explained clearly with the aid of a large cross-section photograph. Specifications and list prices are given.

The three modern typewriter models—standard, master and noiseless—offered by Underwood Elliott Fisher Co. are strikingly illustrated in an attractive folder. Newest of these is the Master, which strikes a refreshing note in typewriter design and incorporates new exclusive operating features along with refinements of older, time-tested ones.

"Defies water, oil, abrasion and time" reads the sub-caption on the covers of the new sample books of Resistall Linen Ledger and Resistall Index Bristol (both 100% new white rag) now being issued by L. L. Brown Paper Co. And to demonstrate these properties, "P.A's" are invited to make three easy tests, which are described in the sample books. The latter include perforated pages which may be removed for use in making the tests.

PURCHASING, 11 West 42nd St., New York, N. Y.

Numbers:

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PAGE 6

The advantages of handling many materials via its Lo-Hed hoists are presented in an attractive 28-page, 81/2" x 11" catalog issued by American Engineering Co. Claimed to be the only hoist designed for use where headroom is limited, Lo-Hed is also adapted for all types of headroom conditions. Included in this thorough catalog are photographs of Lo-Hed in actual operation on various jobs, illustrations of all models, construction details, complete specifications, blue prints and tables of capacities, hoisting speeds, height of lift, weights and other data.

406. "Wings of Business," an illuminating 24-page 8" x 10" booklet prepared by the Lamson Co., describes how pneumatic tubes are speeding up the handling of paper work in offices, factories, institutions and retail stores. Besides greater speed, these tubes effect increased protection and personnel efficiency as well as reduction of operating costs, wherever papers, memos, orders, documents or written records must pass from desk to desk, office to office, floor to floor or building to building.

407. One of the most comprehensive industrial catalogs stiff-covered, bound Catalog No. 89, covering the complete line of Walworth valves, fittings, pipe and tools for all industrial needs involving steam, oil, water, gas, air and other liquids and gases. In addition to photographs and detailed specifications, this catalog also provides information concerning all types of metals used in Walworth products, also tables, charts and data helpful in laying out jobs and in figuring sizes and types necessary for specific operating conditions.

408. The new sample book of thin papers just announced by Esleeck Mfg. Co. contains numerous samples for records, forms, copies, letterheads, advertising, legal documents, air mail, branch office and foreign correspondence. A variety of weights, finishes and colors, in grades ranging from 25% to 100% rag content, are included.

The New Springfield Floor Sweeper, claimed to effect remarkable savings in man-power, time and maintenance costs, is the subject of a folder issued by M. E. Calhoun. With a capacity which enables one man to sweep approximately 153,000 sq. ft. of floor space in eight hours, this new machine provides efficient control of dust combined with improved cleaning performance. Made in four different sizes, adapted for large open areas and smaller or congested areas. Present users include industrial plants, factories, railroads, mills, airports, oil stations, warehouses, garages, parks, institutions, shipping terminals, etc.

410. "This Business of Sealing Cases," a helpful pamphlet just issued by National Adhesives Corp., deals with various sealing problems that confront today's users of corrugated or fiber cases as the result of the trend toward design, lighter weight and special finishes. Among the problems covered are those arising from the use of moisture-resistant stocks; special coatings such as wax, ink, varnish, etc.; extra-porous stock; flaps with too much "spring"; insufficient compression time; condition of sealing equipment; handling of the glue.

411. Of special interest to buyers of bolts, nuts, screws, etc., are four reprints of articles that have appeared in various trade publications within recent months. Offered by Lamson & Sessions Co., their subjects are: "The Difference Between Machine Bolts and Cap Screws"; "How Would Upset Parts Fit Your Picture?"; "The Difference Between Rolled Thread and Cut Thread Bolts"; "The Common Machine Bolt." All are well illustrated, especially the latter which features large artistic photographs.

412. An attractive folder stressing the merits of Howard Bond for letterheads and including sample letterheads has just been released by Howard Paper Co.

(Additional listings on pages 4, 8)

I've never been "typing tired" since I've used the Underwood





The little lady of the keyboard will give you a much better typing job if you give her a new Champion Underwood. More than that, fatigue won't dull her wits in the home stretch of the business day ... nor cause her to blunder and throw the office routine out of gear.

You see, instead of pounding, the fingers of the operator do little more than touch the Champion Keyboard on the Underwood. Strange as it may seem, the Underwood saves a ton of deadweight lifting every business day*! It's

With the new Champion Underwood Tuned to the Fingertips.

in your office you will get a smarter, neater typing job. More than that, you'll get so much faster typing production that the closing hour will seldom strike on work undone. Give her a new easiertyping Champion Underwood. There's an Underwood Elliott Fisher Branch within easy reach of your telephone.

*Actual check on energy expended in lifting type bars of all machines to striking position. Ask for a free trial.

Typewriter Division

Typewriter Division

UNDERWOOD ELLIOTT FISHER COMPANY

Typewriter Division

Machiner

Addison Machiner UNDERWOOD ELLIOTT FISHER COMPANY
Typewriters... Accounting Machines... Adding MaTypewriters... Accounting Machines and other Supplies
Typewriters... Carbon Paper, Ribbons and other Supplies
Colines... Carbon Paper, New York, N.Y.
Chines... Carbon Paper, Ribbons Avenue, New York, N.Y.
Sales and Service Rvervwhere

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World's Largest Manufacturer of Typewriters

The Champion Underwood offers ine Champion Underwood of superperformance ... speed ... quality of work ... durability ... simplicity ... easy touch and Cushioned Typing. Every Underwood Typewriter is backed by nation-wide, company. owned service facilities.

THE CHAMPION Inderwood STANDARD TYPEWRITER

June 1938

Yours on Request

Purchasing agents will find it well worth their while to read the publications reviewed on this and the preceding pages. From among the many submitted to us, they have been selected by the editors as having greatest interest and utility value to purchasing agents.

To obtain copies, simply fill in and mail coupon at the bottom of this page.

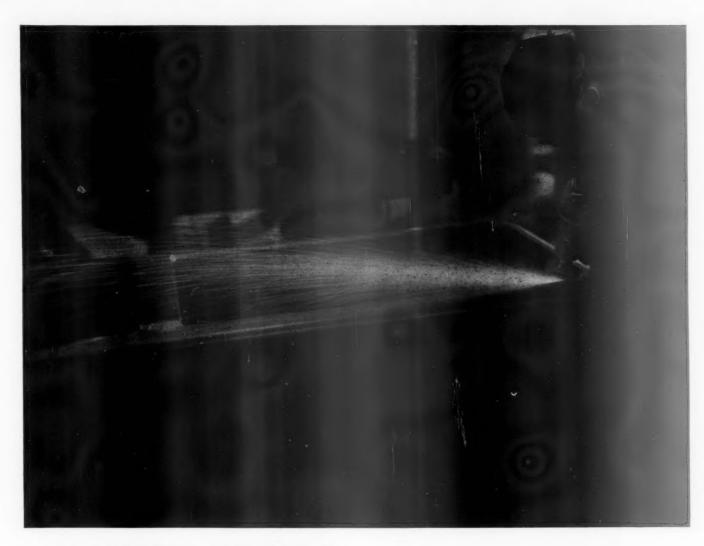
- 413. No purchasing department files can afford to be without the handsome new Catalog F-10 illustrating, in natural colors, the All-Steel-Equip Co.'s newly designed line of steel office furniture. 74 pages $8^1/z''$ x 11", wire bound in a handsome gold embossed cover, this catalog has a unique diecut index which facilitates instant reference to any section. Included are the following file cabinets, available in varying sizes, heights, and drawer capacities: letter, legal, invoice, check, ledger, jumbo size, card, document, combination, storage, blue print, transfer, etc. Also shown are shelving, stationery cabinets, utility racks, wardrobe cabinets, substitute drawers, counter sections, key cabinets, etc. Complete specifications are given.
- 414. "Rust the Destroyer" is the title of a new 24-page $8^{1/2}$ " x 11" booklet which should interest every "P.A." faced with the problem of rust-prevention. Prepared by Pittsburgh Plate Glass Co., it describes five theories of corrosion, concludes that protective coatings must conform to two essentials, and presents six requirements for successful painting to achieve preservation of metal. It also offers general directions for use and preparation of metal surfaces before painting, describes products designed for effective rust-prevention, directions for using aluminum and other paints.
- 415. For purchasing agents interested in standardizing record-keeping equipment a new line of "Service" Sectional Post Binders has been developed by C. E. Sheppard Co. Of superior construction, featuring "piano" type hinges with self-lugs, new compensating mechanism, and lacquering of exposed metal parts, these new binders insure maximum strength and wear. Available with canvas, imitation leather, fiber, and bakelite-fiber covers in all sizes. Complete lists of stock and special sizes, accompanied by prices, are given.
- 416. Starting as a "craze" in Hollywood, motorized scooters have been adopted for commercial purposes, competing with motorcycles and light delivery trucks. Capable of speeds up to 35 miles per hour and traveling over 100 miles on a gallon of gasoline, these "Moto-Scoots" are the subject of a 4-page folder which illustrates models with side car and rear trunks and gives detailed specifications.
- 417. As the result of a recent survey, made in conjunction with a major insurance company, which revealed excessive minor accidents in industry, Lewis-Shepard Co. has issued a new circular (No. 323) showing ways of introducing safety in indoor transportation of materials.
- 418. Of particular interest and value to "P.A.'s" of metal-working plants is the new 48-page booklet, "The Story of Sulphurized Cutting Oils," offered by D. A. Stuart Oil Co. Well illustrated, it features the scientific application of cutting fluids on metals of different analyses, includes an original type of cutting oil application chart, describes results of evaluating tests, fundamental types of sulphurized cutting oils, advice on use, etc.
- PURCHASING, 11 West 42nd St., New York, N. Y.
 I wish to receive the following literature:

Numbers:
Name
Company
Address

- Practically every industrial need for hand trucks is covered by the diversified line of Fairbanks Hand Trucks illustrated in the new 24-page, 8½ x 11″ Catalog No. 51-49 just released by the Fairbanks Co. Besides general purpose trucks, the catalog shows the following special types of trucks: warehouse, barrel, cement or bag, freight or cargo, grain, sugar or dock, cotton, dry goods, feed, ash barrel, ash can, roll paper, pan-nose paper, cheese and butter, shoe, parcel post or silk, oxygen, refrigerator, one-man, etc. Specifications accompany all descriptions and illustrations.
- 420. Citing statistics of 150,000 workers injured by slipping and falling while on duty every year, a handsome 16-page booklet published by Inland Steel Co. shows how the unique construction of Inland 4-Way Floor Plate reduces such accidents. Numerous installation photos show uses for this patented plate wherever safe footing and sure traction is required ... in factories, power houses, public buildings, railroad cars, truck steps and walkways, stairways, loading platforms, bridge treads, dam walkways, etc.
- A new letterhead portfolio on Fiscal (25% rag content) Bond has been issued by Rising Paper Co. In addition to sample swatches of five colors and white, the latter in four weights, the portfolio shows nine different designs for one letterhead.
- Various types of rolling doors for industrial plants, warehouses, garages, etc., are illustrated and described in the Kinnear Mfg. Co.'s 24-page, 81/2" x 11" Catalog 19. Detailed specifications are accompanied by instructions for installation.
- 423. Modern methods for cleaning operations necessary in truck motor repairing and fleet maintenance are described and illustrated in an interesting 36-page booklet released by Oakite Products, Inc. Cleaning cooling systems, washing motor interiors and exteriors, cleaning engine repair parts, washing truck bodies, methods of paint stripping, steam cleaning chassis and general maintenance cleaning are among the many subjects covered.
- **424.** Capable of handling loads up to 20,000 pounds, various types of "Ironbound" Skid Platforms and details of their construction are illustrated in a 4-page $8^1/2$ " x 11" folder released by Ironbound Box & Lumber Co. In addition to standard sizes and models, these unique skid platforms can be had specially designed for any particular need or in any desired size.
- 425. New developments in loose leaf binders and equipment are illustrated and described in eight supplementary catalog pages just released by The Federbush Co., Inc. Binders shown are adaptable for price books, bulletins, sales and service manuals, productions records, reference data, etc.
- **426.** Too numerous to list here are the varied types of packings and gaskets, specially designed for specific industrial requirements, included in the complete Johns-Manville line. Covering all types of industrial service, these products are presented in a new profusely illustrated 48-page, $7^1/2^n \times 10^n$ catalog. Also included are a table showing recommendations for specific applications of the various packings, advice on how to get best results from packings, specifications, etc.
- The 26th edition of its catalog, just released by L. S. Starrett Co., contains complete descriptions, illustrations and prices of 14 new tools as well as of the more than 3000 improved tools and standard items in the Starrett line. Its 282 pages are arranged for ready reference with a quick finding index to the various sections devoted to tapes, rules, micrometers, verniers, dial indicators, gauges, calipers, hacksaws, etc. Many photos show how precision tools are used in modern industrial plants.

(Additional listings on pages 4, 6)

City



NORTON WHEELS on your Portable Grinders for Fast Cutting . . . Good Finish

THESE are the two important requirements of wheels for grinding welds—
fast cutting to quickly remove the excess metal, a smooth surface for the
subsequent finishing operations. There are Norton Wheels that are developed
especially for the job—straight wheels, cup wheels, cone wheels—rubber
or resinoid bonded wheels of hard, tough Alundum abrasive.

NORTON COMPANY, WORCESTER, MASS.

New York Chicago Detroit Philadelphia Pittsburgh Hartford Cleveland Hamilton, Ont. London Paris Wesseling, Germany Corsico, Italy





MORSETHERE IS A DIFFERENCE

TWIST DRILL & MACHINE COMPANY NEW BEDFORD, MASS., U. S. A.

NEW YORK STORE, 130 LAFAYETTE ST. CHICAGO STORE, 570 WEST RANDOLPH ST.

F. O. B.

(Filosofy of Buying)

From the Convention Notebook

"THE Spirit of St. Louis" now has a new and delightful personal meaning for twelve hundred purchasing agents.

The only serious complaint about convention arrangements was the baseball schedule, which brought together the 7th-place Athletics and the 8th-place Browns.

The taxi fleet at the Union Station Sunday morning, provided by the convention committee, set the keynote of an unusually thoughtful—and greatly appreciated—spirit of hospitality that was evident throughout the convention period.

Most difficult assignment was that of the committee of Inform-a-Show awards. The standard of the exhibits, both from the artistic and the informative angle, set a new high.

One P. A. who went to St. Louis on vacation time, met so many of his sales friends at the show that he is asking the home office to reclassify the trip as on company time.

It might have been a smart idea for the California contingent to distribute dime banks along with the familiar poppies, to help us prepare for the long hop in 1939. California, here we come!

We understand that Foreign Trade Week had a little trouble getting on the air waves from St. Louis, due to some domestic difficulties involving the Electrical Workers Union. However, Secretary Roper's address to the purchasing men rated a national hook-up, and Julian Davies and Benedict Van Voorhis were drafted from the convention program for a rebroadcast over Station WIL.

We'll rate the Old Heidelberg Octet 100% on their uniforms, their courage, and their good nature in a difficult spot. Some day we hope to hear them sing.

Bill MacMillen again had tough luck in staging his Iron & Steel Committee dinner, when the plane bringing one of his principal speakers was grounded for three hours—too long a delay to meet the appointment. However, he believes he now has the key to the jinx. Last year it was Ben Fairless, this year Ben Schwartz, who was unavoidably detained from making the scheduled appearance. Henceforth, Bill has resolved to steer clear of fellows named Ben in making his arrangements.

Professor Lewis' recital of three, four, five and sevenway reciprocal dealings suggests that the term "reciprocity," with its simple two-way connotation, is no longer adequate in describing the process. Perhaps we should call it the Business Merry-go-round.

The professor's allusions to specific cases were carefully disguised with fictitious names. Nevertheless, there was many a knowing nod of recognition among the audience. Or maybe it's simply a case of "everybody's doing it."

Julian Davies' threat that Canada might start an independent business boom if we in the States delay much longer, was received with general enthusiasm. Business is not fussy as to where or by whom the recovery cycle is started, so long as it gets under way soon.

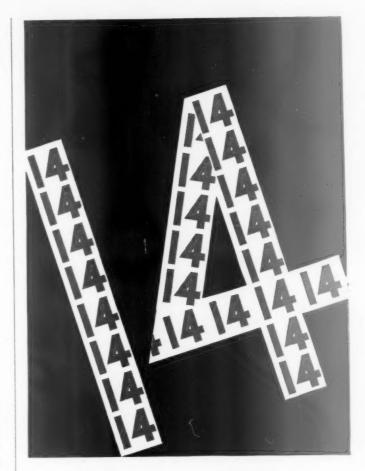
Joe Nicholson's elevation to the N.A.P.A. presidency—a popular choice—assures purchasing of vigorous and articulate leadership during the coming year. He has long been known as an outspoken champion of the profession and a hard worker for better buying.

It is no reflection on previous convention cities to remark on the steady growth of the national convention in size, calibre, and interest. That is as it should be, and the whole purchasing fraternity shares and rejoices in this notable progress. Year after year it puts an increasing burden of responsibility on the home association, and year after year that challenge is impressively met. Congratulations, St. Louis. You put on a great meeting, and you were marvelous hosts.

The consensus seems to be that the business traffic light has changed from red to the warning yellow signal. Are you ready for the green?

LIOT HENSEL, Los Angeles advertising executive, addressing the San Diego Ad Club last month, cited a recent study of selling methods in which dictaphones were placed in purchasing agents' offices, without the knowledge of either buyer or seller. The result of this investigation, he reported, showed that the average sales approach lacked information and ideas, talked price and reciprocity rather than quality or service. Curious Cuthbert would like to know the revelations, if any, regarding purchasing science.

Mr. Hensel also declared that "Each of our depressions for the last fifty years has resulted in an improvement in technique of selling." That is probably true of business techniques generally. Sweet are the uses of adversity.



B R I L L I A N T C O L O R S

AND THE WORLD'S WHITEST BOND PAPER

Compare it! Tear it! Test it!
And you will specify it!

ENVELOPES to MATCH
WATERMARKED "The Nation's Business Paper"

The Howard Paper Company, Urbana, Ohio	
Send me the New Howard Bond Portfolio	
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MESSAGES TO THE CONVENTION

HON. DANIEL C. ROPER

Secretary of Commerce

In this highly complicated business era the purchasing agent is faced with new responsibilities requiring an unusually broad range of knowledge and statesmanship. Haphazard methods will not work under present conditions. The need is for a developed sense of insight into the future, accompanied by a well balanced judgment.

Competent buyers of goods are naturally sensitive to factors which affect fundamental economic conditions. Thus they seek to occupy the middle ground between hesitancy, inspired by fear and doubt, on the one hand, and excesses, prompted by extreme optimism, on the other. Under the terms of this standard of safety for efficiency, it is important that the purchaser be guided by a broad understanding of economic trends and make liberal use of common sense yardsticks. Thus implemented, he will make the best contribution to his own and to the public welfare.

Since last September, deferred buying, prompted by a recession in general economic activity, has resulted in considerable reduction in inventories. The consequence is a gradually improving backlog of need in consumer and durable goods. This situation has not detracted from the fundamental soundness of the country but tends toward a forward movement. To the end that momentum be encouraged and stimulated, the Federal Government, through arrangements for a large expenditure of funds, is endeavoring to aid in setting the recovery processes in motion.

The permanent success of this program will depend on the extent to which the industrial mechanism assists in developing its own far-flung facilities. With a cooperative attitude in this respect on the part of industry and labor, we can anticipate enlarged industrial buying in the not far distant future.

DONALD R. RICHBERG

Formerly Administrator, N. R. A.

If we in America had a keener daily consciousness of difficult and unhappy conditions prevailing throughout the world, we might not yield assent so readily to criticisms of business, finance and labor, or to criticism of government. We need patience, tolerance, faith in ourselves and in the good will of our fellow men, much more than we need heated denunciations of policies and programs with which we may disagree.

FREDERICK MESSNER

Brookmire Economic Service

Slowly but persistently, the forces making for an upturn are appearing after a year of upheaval in business and in the markets. Above all things, it is necessary for the government to restore the type of confidence which results in the will to use the abundant supplies of credit and capital that are available to business. That is why such developments as substantial modification of the undistributed-profits and capital-gains taxes are so important. In the terms of what we expect, all this means that the trend of business and of commodity prices should be upward in the second half of the year. The rise will be tempered in agricultural prices to the extent that present prospects of large crops may be realized this summer, and some industrial products, notably steel, continue too high. Purchasing agents should think increasingly in terms of resuming a policy of forward coverage, and must be alert to the inflationary implications inherent in present government policies.

ROGER W. BABSON

Economist

This is no time to be bearish or to sell the United States short. There is coming a time when, all of a sudden, the nation will realize that inflation is here. The change will come almost over night. When people lose faith in government, look for the inflation storm to break. There are signs that business is bottoming out. It will move upward, and things should be looking a whole lot better by the November election. Necessary adjustments, with few notable exceptions, have now been pretty well accomplished. In looking for business recovery, I have fully considered the numerous unsettling and unfavorable factors in the picture. These have been thoroughly discounted. Buyers: Stick to proved fundamentals. Be realistic. Dare to act. Plan on better business!

DR. LEWIS H. HANEY

Professor of Economics, New York University

The greatest danger today lies in the huge spending program of our government. This makes the present administration the largest purchasing agency in the history of the world. But what does it propose to buy? As purchasing agents, you know that there are some things that money cannot buy, among which is business confidence. You should know whether it is possible to buy such things as health, happiness, and prosperity. Can we afford to pay more for goods than they can be sold for? Can anyone buy profits? We are now probably at the bottom of a severe business depression. What we have most to fear is the creation of so-called purchasing power. As purchasing agents you know that real purchasing power comes only from earnings based upon the sale of products which others are willing and able to buy.

CHARLES R. HOOK

President, National Association of Manufacturers

The incentive system of industrial production, generally called capitalism, has brought about in this country the highest standard of living the world has ever known. Imperfect though it may be, it is nevertheless the only system that has stood the test of time—the only system that properly encourages and rewards individual ability, effort, initiative and thrift. It is the only system that provides, to individuals and to groups of individuals, the incentive to help themselves and at the same time to make this a better world in which to live. Let us defend it to the last ditch from the attacks of those who would substitute another system or who would sabotage it by weakening the mainspring—incentive—for unless our people are free to pursue each opportunity as it is recognized, unless they are assured of a share in the profits of accomplishment, there is no incentive to work, to risk, and to create.

To protect our standard of living in this country, it is necessary, it seems to me, to protect the system which made that standard of living possible in the first place. And to accomplish that it is necessary that the rank and file of people be informed as to the importance of this incentive or profit system to their own individual welfare.

If we will all join—concertedly, consistently and vigorously—in a movement of enlightenment, we will perform the greatest possible service for our country. We will protect for ourselves and for future generations that which it has taken years and years of toil, sacrifice and ingenuity to build.



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Approaching the Turn

HILE comment on the immediate business situation was naturally on the grave side, the St. Louis convention of N.A.P.A. was distinctly cheerful, if not enthusiastic, regarding the outlook for business—and purchasing men have rather a high record of accuracy in calling the turn. The fact that there was no inclination to gloss over present depressed conditions, and no resort to wishful thinking, makes it all the more impressive that purchasing agents, by and large, are looking ahead to a substantial recovery—in 1938.

Economists, commodity experts, and industrialists alike, joined in this prediction. The consensus was that the reversal of the business trend will come suddenly, and will reach substantial proportions. The unpredictable factor is in its timing. But even on this debatable point, several were willing to hazard a well founded opinion. Granting a continuation of the present sidewise movement for several weeks to come, one speaker set September as the month for the turn—then qualified his pronouncement with the phrase, "or sooner."

Statistical analysis indicates that the low point of activity has been reached. Prices generally are in a buying zone, but without the immediate incentive to buy on price alone. Many of the vital readjustments have been accomplished. Inventories are abnormally low, being geared to present low operations. Deferred demand is building up a compelling pressure. In other words, the upturn awaits only some impelling spark to set the wheels in motion.

Whether that spark will be because of or in spite of governmental action, is an academic consideration. It is likely that distrust regarding the administration's policy may serve as a check against over-optimism. But there is a growing confidence that economic need will prevail and will sustain an inevitable advance.

Among the practical indications of this impending recovery, weatherwise purchasing men point out that customers are beginning to arrange tentative delivery schedules, fortifying themselves against the possibility of a period of shortage when actual delivery instructions are issued; scrap dealers, particularly in the non-ferrous field, are actively buying; some factories that have been operating on short time have posted notices that all vacations are to be taken and completed prior to August 1st.

Not the least significant indicator is the selection of San Francisco as the 1939 convention city. That choice represents a desire long cherished by western buyers and by the Association as a whole. For some months past, however, there has been a general feeling that if adverse business conditions were to continue, the selection of the Coast city would so curtail attendance on the part of eastern buyers as to make a postponement advisable, to some more favorable occasion. The decision to go ahead, now, is a notable expression of confidence.

The next move for business is up!

STUART F. HEINRITZ, EDITOR

land,

Future Minimum Coal Prices Under the Act of 1937

YOU ARE INTERESTED in the procedure the Commission is to follow in the establishment of the forthcoming minimum prices. I am assured that there is going to be no undue or unjustifiable and dangerous haste in the procedure this time, and that when the prices are established, there will be no reason to believe they will not stand the acid test of appeals to any Court

The Commission has held a hearing to determine what discounts will be allowed distributors. That hearing has been adjourned until June 27th, and the Commission is now developing the procedure for the hearings when resumed.

The Commission will hold a hearing in Denver on June 7th, to determine the weighted averaged cost of production for Western producing districts. Shortly thereafter, another and similar hearing will be held in Washington to determine the weighted average cost of production for the Eastern producing districts. The Commission will then order the various Districts to propose minimum prices on their coals and a hearing will be held on those proposals. It is probable, the Commission will divide that hearing as it has the hearing on weighted average cost of production. Thereafter the Commission will order the Districts to coordinate the prices, hearings will be held on the coordinated prices and then the Commission will establish the minimum prices. In the hearings, or associated with the hearings on prices, we understand opportunity will be given to consider related questions such as the classification of coal, the establishment of consuming markets, and other questions. This program is subject to change. The Commission is struggling with the whole problem and is trying to insure that these prices will be established fairly and validly.

We have made a fair start in our effort to induce and compel the sale of coal to be made on an analysis basis. The inspiration for that work came from your National Association of Purchasing Agents. We are making progress and with the cooperation of the Commission we hope to accomplish much in that respect. We need your continued help in that effort.

In testing the weighted average cost of producing coal, it will be impossible to do, at this time, the job which real regulation demands of us—the job of auditing every item which goes into the reports of cost of production. That would be a job involving the expenditure of millions of dollars and years of time. We must do the best we can with it in the time available and with the money available, and then we must keep

JOHN CARSON

Consumers' Counsel
National Bituminous Coal Commission
Department of the Interior
Washington, D. C.

eternally at it. We need your help. We shall try to work out a method of keeping you informed as to details of cost as reported by the producers and we will welcome your comment, your advice, your criticism.

The task before us in examining the proposed prices is somewhat similar to that with reference to the weighted average cost of production. Some groups of consumers have been consulting with us, have been gathering information relative to their coal purchases, and have been conferring with representatives of District Boards and with the Commission. The Commission has expressed to us its appreciation of this interest and this cooperation on the part of consumers.

The Consumers Digest is intended to be merely a brief reporter of news and to inspire inquiries. Gradually we plan to develop something in the nature of a town meeting of consumers through correspondence. To consumers who have indicated an interest, we have sent a copy of suggestions we made to the Commission relative to the classification of coals. Some consumers have suggested wherein the Act might well be amended, and I have asked them for a brief paper on the subject. If our plans develop successfully and the experiment is justified, we shall have those papers mimeographed and distributed with the request that you write to us, and perhaps then your views will be summarized and distributed. In so far as possible, we are going to use the trade journals in this work.

This effort associated with the Bituminous Coal Act appeals to me as an opportunity to "make Democracy work" and it is that phrase of our President which I like more than any of the phrases he has used. It is not an idle phrase. We have before us, you have and we have it, the problem of making Democracy work. I want to continue to live in a Democratic country and where Democracy will have as its objective that men and women shall have the opportunity to attain to greater and greater freedom, and I mean economic freedom. A Democracy cannot survive if it does not make progress in that respect, progress to assure our people that there is every cause for hope. If we were really wise, we would forget the insanity of personal and political prejudices, we would denounce the propaganda and demand facts and then deal with the facts as objectively as intelligent men would deal with them.

Continued on page 68

Conditions in Container Boards

ALAN G. GOLDSMITH

Vice President Mead Corporation Chillicothe, Ohio

FOR YEARS WE have been hearing a great deal of controversial conversation about jute liners as against kraft liners and jute corrugating board as against straw, chestnut, pinewood and other media. As long as some twelve years ago, when kraft board was first introduced, we heard that this board would drive the jute product out of the market. On the other hand, at that time the jute people felt that the advantages of their board would in many cases outweigh that of kraft. After all, jute board was manufactured primarily from a waste material, and kraft from virgin wood. Therefore, kraft would not, ultimately, in their judgment, make great inroads into the jute industry.

Neither opinion has been entirely borne out by facts. During the depression, kraft did make great inroads in the liner field. In 1928, there were manufactured 832,000 tons of jute liner, against about 165,000 tons of kraft. Kraft made not quite 17% of the total of liners. By 1933 it was producing in tons over one-third of the liner and corrugating material manufactured. This meant more in terms of square foot coverage. As a matter of fact, in liners alone in that year kraft production was 479,000 tons against 735,000 tons of jute or almost 40% of liner separately.

This general proportion was maintained until 1937 when additional kraft capacity built increased the kraft ratio and it is still increasing.

As a matter of fact, the figures for 1937 do not give full weight to the new kraft capacity. It did not come in early in the year, and the big demand for container board took up all kraft capacity in the spring and plenty of idle jute besides. In liner alone 775,000 tons of kraft and 1,048,000 tons of jute were produced, kraft having a position of about 43% of total liners.

On the other hand jute has not yet been entirely driven out of the market and will not, in my opinion. be entirely eliminated. Up to the present time, most of the merchant jute mills are out of the picture. Some of them, in the midst of the old paper market. and able to service container plants with low freight and quick service, are still running. Some of the higher cost mills belonging to integrated units having their own box shops, are now being closed down. There does not seem to be any question that some units will continue to operate, some few in the merchant field, but particularly in the integrated field where the freight rate to the container plant is negligible and the mill is located on top of plenty of old paper stock. Jute has its place in the container field and under certain conditions will continue to furnish a certain proportion of the liner made.

In the corrugating field the advantage of kraft over straw and chestnut and other so-called northern products, is not as noticeable as it is in the liner field. Although kraft has made pronounced improvement as a corrugating medium, it has not yet been able to drive out high-grade hard straw or chestnut

to the degree it has driven out jute liner, and its cost advantage is not as great. In 1928 the production of kraft corrugating stock was negligible: 1,600 tons out of a total of 360,000. By 1937 kraft .009 corrugating had risen to 153,000 tons out of a total of 734,000, or about 21%, only about half the percentage held in the liner field. Chestnut corrugating stock alone, produced during most of the period by one company, rose to 92,000 tons or about 13% during approximately the same period.

In looking into these boards, we have certain fundamental factors to consider. The term jute is, of course, a misnomer. Jute is no longer used in the manufacture of so-called jute liner, and has not been so used for many years. Kraft pulp has been substituted. Ten years ago, by rough and ready calculation, a jute liner board consisted of about 25% kraft pulp and 75% of old paper stock. The weight formerly was close to 70 pounds per 1,000 square feet, but today the standard weight is 64 pounds. Owing to the increasing amount of kraft coming back in the form of waste, the percentage of virgin pulp needed for the production of a high class jute sheet has been considerably reduced. Many producers have also been able to



Address before the National Association of Purchasing Agents, Paper Shipping Container Committee, May 25, 1938, at St. Louis.

reduce the weight somewhat below 64 pounds, but this has not become common practice.

Jute liner is manufactured on a multi-cylinder machine, and originally all kraft liner was manufactured with similar equipment. Cylinder all-kraft liner weighs 56 pounds per thousand square feet for the standard .016 and is a superior product taking a premium in price. Its competitive advantage is, however, not in the costwise field, and the sheet is generally used for special requirements. It has great advantages from a quality point of view.

The filled kraft cylinder sheet consists of a blend of kraft pulp and old paper, as does a jute sheet, except that its percentage of kraft is greater than is used in ordinary jute. The differentiation between a filled kraft sheet and a jute sheet has been rather arbitrary. Kraft people manufacturing a blended liner call it a filled kraft. In many cases Northern jute manufacturers have claimed that there is very little difference. However, the furnish does contain more kraft pulp than jute liner does. Certain other products, such as Lynchburg liner, which is manufactured from a blend of kraft and chestnut pulps with a small mixture of old paper stock, have been generally classified as jute. Up to the present time, cylinder machines have not been able to approach Fourdrinier machines in speed, and for this reason, Fourdrinier machines have been able to roll off more footage per day with resultant reduction in cost.

Now we get down to Fourdrinier kraft which is the controversial item. The cost advantage of a Fourdrinier kraft liner is realized, of course, in its light weight per square foot, and the ability to get tonnage on a high speed machine. Even assuming that the per ton cost were the same as jute liner, the weight varies from 42 pounds to 52 pounds per 1,000 square feet according to the grades produced, as against 64 pounds for jute. In other words, you get around 25% more coverage with a corresponding dollar premium per ton.

Jute generally has an advantage in body and printing surface. It may be said that it produces a body wall which is compression resistant. Kraft has great tensile strength combined with light weight, but in the dry finish grades, its surface does not give the printing qualities of jute. These are important as more and more advertising goes on to containers. Water finished kraft combines the advantages, but it does weigh more than the dry finished article.

Fundamentally, in a kraft liner we have a light weight product with a very low cost per thousand square feet. It is obvious that this product will make further inroads into the jute field. In another year or two, I believe, we will find that instead of jute, straw, etc., holding about two-thirds of the corrugated container field, kraft will probably take the two-thirds position, and jute will probably be down to onethird or somewhat below. On the other hand, the increased use of kraft board itself will make the remaining jute mills more competitive. There will be fewer takers of old paper stock, and the increased amount of kraft going into the waste will result in a higher quality of raw material for the jute manufacturers. This higher quality will mean that well situated jute producers can operate with a larger proportion of cheap old papers and less virgin kraft in producing their product. This may also result in a lower weight per square foot, the strength factor being equal. Three of the outstanding integrated jute producers have also erected kraft pulp mills in the South so that they will be assured of a cheap and plentiful supply of the pulp portion of their jute liner.

In my opinion, the result will be, as I have stated above, that a number of jute mills will stay in the market.

In the corrugating member, the kraft advantage is not as great as it is in liner. This is shown in the historical development. The cost of strawboard does not put this grade so far out of line. The standard weight of strawboard has gone

from 38 pounds per thousand square feet to 34 pounds and some is now being manufactured as low as 30 pounds. The quality of strawboard has increased immeasurably during the last ten years. Chestnut corrugating board, which entered the field about the same time as kraft, is produced from a product which previously went into the boilers as fuel. It is being supplied today from 26 pound to 32 pound weights, but an excellent product has been recently attained at 26 pounds, which is the standard weight for kraft. Pinewood and gumwood are other low cost products.

As indicated before, during the last four or five years, prior to the recent influx of kraft, the volume of kraft corrugating board reached only about 20% of the total amount of corrugating board consumed, as against approximately 40% of liners. Recently the greater volume of good waste has brought a chip corrugating board into the market. As this is not competitive in quality and pound for pound is inferior to standard products, it will probably not make great inroads, but it shows how kraft board is building up, in a sense, its own competition. There is bound to be an increase percentage-wise in the kraft take in corrugating board, as well as in liner, but this will not be so pronounced as in liner. I should judge that half of the corrugating board manufactured in this country, will, in the future, still be straw, chestnut, pinewood, etc.

I believe this shows the picture as it will exist three or four years from now; beyond that time, it is difficult to forecast.

HERBERT H. WALDSCHMIDT has been appointed director of purchases for the Youngstown Sheet & Tube Co. Youngstown, Ohio. The activities of the general purchasing department and the purchasing of raw materials will be consolidated under his direction. C. T. Moke continues in the position of purchasing agent. Mr. Waldschmidt has been associated with the company since 1920.

SILHOUETTE STUDIES

27: Lee J. Bussmann

MONG THE TWELVE HUNDRED A purchasing men converging on St. Louis for the N.A.P.A. convention last month, were a considerable number who were visiting the city for the first time, yet-curiously enough-felt a pleasant sense of familiarity. Their explanation was simple: "Lee Bussmann is a friend of mine." For the general chairman of the convention committee, in addition to his many other qualifications for the job, enjoys a rather extraordinarily wide circle of genuine friendships. And though he is something of a cosmopolite, the names "Bussmann" and "St. Louis" have long been synonymous among purchasing men.

For some years past, it has been customary to draft Lee for a position near the center of the head table. His selection as convention chairman and as toastmaster for the annual banquet was a foregone conclusion. That was not only a tribute to his ready wit, poise, personality and ability to keep things moving. It was the recognition of another basic trait in his nature. He likes a good time, and is never so happy as when his friends around him are enjoying themselves—which is an excellent foundation for the success of any party, whether an intimate social gathering or a complex national business convention.

Along with this, he possesses to a high degree another trait essential to effectiveness in business and association activity—the ability to work with others.

There is one more factor that has contributed largely to his success and popularity as a master of ceremonies. Perhaps it has been developed as a result of his keen study of the theater and its workings. It is his appreciation of the way effects are put across through painstaking preparation and attention to detail. The delegates at St. Louis will testify that their every wish had

been anticipated and provided for beforehand by the committee which Lee directed.

LEE BUSSMANN IS the next to the youngest of six brothers. His parents came to this country from Germany when very young, settled and later married in St. Louis, where his father worked as a foreman in a stove factory—and proceeded to raise their family of six sons and two daughters.

Equipped with a parochial grade school education, the thirteen year old youngster found a job as errand boy for an electrical contractor, and later became clerk, stenographer and collector for the fuse manufacturing division of a motor repair concern, thus serving his business apprenticeship in the industry with which he has been identified ever since. But even at that early age, he showed that diversity of interests which is one of his outstanding characteristics.

Active and energetic, he acquired a local reputation in sandlot and industrial league baseball as a flashy infielder, base thief and umpire baiter. Industrious and ambitious, he found time to supplement his education by completing eight or ten extension courses at a business college and at Washington University, in letter writing, public speaking, business law, business administration, transportation, and related subjects-including several courses in industrial purchasing, one of which was under the supervision of Dr. F. W. Russe of the Mallinckrodt Chemical Works.

Meanwhile, with his brothers who were also engaged in the practical side of the electrical industry, he spent his spare hours in the development of a little side-line business venture, the manufacture of fuses. It was their hope that this undertaking would eventually become a full-fledged company on its

own account, claiming their entire time and attention.

That time came sooner than they expected. On the last day of 1913, Lee decided to sever his connections with the motor repair concern and work full time at the business of making electrical fuses, for by this time the Bussmann Manufacturing Company had been definitely launched. Since then, all six brothers have become active in the family enterprise.

It has been a harmonious and successful arrangement from the start, due to the fine feeling of solidarity in this family. As soon as the size of the business warranted a formal organization plan, each of the brothers assumed a specific responsibility-general administration and financial management, sales and advertising, production. Lee's assignment, after several years in active charge of production, has been the purchasing department. The company, now a division of the McGraw Electric Company, employs four hundred and fifty people, making a full line of electrical fuses of nearly all types, also Buss Lights, Fustats, and Fusetrons.

E HAS PROVED TO BE a competent H purchasing executive. His talent for organization and detail have stood him and his company in good stead, and his extensive background of practical experience in the industry has been invaluable. No believer in intricate contract arrangements, and fundamentally opposed to special deals of any sort, he conducts his department on a straightforward business basis. Friendly and approachable by nature, and with an unusual appreciation of the salesman's viewpoint, his relationship with suppliers is on an excellent plane of mutual understanding, that never loses sight of the primary function of buying. It is his practice to get acquainted with his important suppliers and to visit them regularly. He carries out his belief that a purchasing department should be operated on the same fair and liberal policy as management generally wishes to enforce for their sales department. It is his understanding that the "Golden Rule" of business does not mean to chisel on one side of the house and to "cooperate and conform" on the other side.

He has a real enthusiasm concerning the possibilities of purchasing as a function of industrial management. In fact, he believes that a business house can almost be rated by its viewpoint on purchasing, this being evidenced by the large and successful firms that put their purchasing on the proper basis with a well managed, well supported, and well paid personnel. And since these possibilities are still among the undiscovered and unrealized assets of a large sector of business, it is natural that his enthusiasm should be translated into earnest and practical work in the one agency best equipped to develop and foster a wider effectiveness and application of purchasing principlesthe Purchasing Agents Association.

Taking over the purchasing job in late 1919, he promptly joined the St. Louis Association, and attended his first national convention in 1920. He hasn't missed one since. He served as secretary of the St. Louis group for four years, 1925–1928, following this by two terms as president in 1929 and 1930, and again in 1937. During the interim, he was chosen to represent his district as National Vice President on the Executive Committee of N.A.P.A. He is now national director of the St. Louis Association.

Working on national projects, he has made a notable contribution by his service as chairman—for the past six years—of the N.A.P.A. Committee on Purchasing Department Organization and Procedure. The personnel of this committee comprises the chairmen of all National Committees and Groups, and members of the Executive Committee. Under his direction, that committee has collected a wealth of information

on specific phases of purchasing policy in representative companies, has analyzed and organized that information, and has made it available in a valuable series of monographs. That accomplishment has been aptly described as the forerunner and foundation of the handbook project now being brought to completion by the Educational Committee of the National Association. In the compilation of the handbook itself, the committee has again been called upon to collect much of the basic data to be incorporated in the plan.

T'S A BUSY LIFE, yet Lee finds time to ride his personal hobbies with keen and tireless enthusiasm, and his interests are wide in scope. At the top of the list is the theater in all its forms, from Grand Opera to the movies. He gets to New York frequently to see what's new along Broadway, and is at the same time an appreciative critic of both the artistic and commercial side. His pet peeves are Irish tenors, sister harmony teams, child prodigy "blurbs," producers who attempt to excuse their own lack of taste by protesting that "It's what the public wants," and ticket scalpers and other parasites attracted to the theatrical business.

Incidentally, he makes good use of this familiarity with the latest productions to freshen his own extensive repertoire of gag-lines, epigrams, and illustrations, for he tells a story exceptionally well and uses the anecdotal method with telling effect to point a situation or to enliven a party. The genial fellow with the surprisingly deep and somewhat husky voice, can be depended on to put his point across in a way to reach the hearts of his audience and to make them remember. Despite his close attention to dramatic affairs, he has scrupulously avoided any connection with amateur theatricals.

He has a similarly intense interest in sports of all kinds. He manages to be present at most of the World's Series games, boxing championships, important football contests and other major sporting events. His interest is not merely that of the casual spectator, for he has been an active and proficient performer himself in several branches of sport, particularly baseball, soccer and tennis. He has been to the Missouri State Prison twice—both times to play against their first baseball team. Currently he plays a better than average game of tennis, and keeps in condition with handball and volley ball. With characteristic foresight, he is just starting in on golf.

Among his other interests, he is an enthusiast on scenic photography, and has accumulated a fine collection of important scenes taken during his travels in this country, Canada, Mexico and Europe. He is also a fair amateur magician. An individualist in politics, leaning toward the liberal side, one of his favorite diversions is arguing business and economic questions with those qualified to enter such a debate. He also likes to preside at meetings of the lighter sort.

But most of all he values and enjoys the friendships of those whom he meets in social, business, and association life. And the number of his friends is legion, for Lee Bussmann gets around—and he's a regular fellow.

—S.F.H.

THE WINNERS

Shipman Medal

Thomas W. Harris, Jr., Division Purchasing Agent, E. I. du Pont de Nemours & Co., Wilmington, Del.

The 1939 Convention

San Francisco.

New Orleans Attendance Cup Baltimore Association.

Inform-a-show Awards

Most Informative Exhibit: Youngstown Sheet & Tube Co. Honorable Mention: Broderick & Bascom Rope Co.; Columbia Ribbon & Carbon Mfg. Co.

Most Attractive Exhibit: Jones & Laughlin Steel Corp. Honorable Mention: Bridgeport Brass Co.; Western Cartridge Co.

Chicago Award

The Chicago Purchasor, Chicago Association, F. J. Heaslip, Editor.

PURCHASING PROCEDURE

Is Experience Always the Best Teacher?

DONALD G. CLARK

Comptroller Brown & Sharpe Mfg. Co. Providence

It has been said so often that "experience is the best teacher" that I should hesitate to attempt to controvert that statement, even if I thought it not wholly true. Inasmuch as I sincerely believe that there is no substitute for experience and that, of all the factors in a well-rounded life, experience contributes the most to success, I can only heartily endorse the time-worn maxim—Experience is the best teacher.

There are, however, many and diverse methods of gaining experience. Life is complex, business is many-sided. And it is undeniably true that no one man can hope to learn by *personal* experience more than a fraction of the answers to problems he will meet. And so we learn, still by experience, but not merely by our own experience. Rather, we attempt to use the experience of others as set down in volumes or as related in addresses or as recorded in tangible results.

History, biography, science, even fiction, are but the records of experience. Education itself is simply a method of placing the experience of others at the disposal of the student without the necessity of undertaking unguided the facing of situations and learning by his own trial and error. Experience is the best teacher, but she has various methods of instruction and the personal unaided meeting of problems and finding of solutions is

only one of them. It is also, let us admit, the most effective. And by far, the most expensive.

No, experience cannot be taken lightly. Many a purchasing agent has achieved an outstanding place in his profession who never saw a college, say nothing of a graduate business school. And I would rather, of course, take one of these experienced, shrewd, case-hardened buyers to spend my money than trust the job to the most carefully educated graduate with the most brilliant record from the most distinguished school or series of schools. There is no substitute for experience in purchasing—or elsewhere.

Now let us attack our real point of discussion with the full recognition that we are not seeking the theoretical but the practical, that experience is recognized as an essential to successful purchasing, and that we are not worshipping any fetish of college preparation for business life. And let me call your attention briefly to a few things that I think every forward-looking purchasing agent should recognize.

The first has to do with the increasing complexities of the purchasing job. I can imagine how simple the earliest buying jobs must have been. The field was limited geographically by the restrictions on the speed of transportation. The number of vendors available was comparatively small. Changes in requirements were rare. Production pressure was a thing unknown in the modern sense of the term. Business tempo was moder-

ate. Cost analyses were unborn or, at least, in their infancies. It must have been a leisurely, unworried, peaceful job in those days. A good Yankee horse-trader with patience, a sense of humor, and a yen for bargaining must have revelled in the work.

Times changed, as they have a habit of doing. The world became the buyers' field. New transportation developments made it as economical to buy at a distance as next door—and as convenient. Sources of supply multiplied. Specifications arose and changed overnight. Research in chemistry and physics revolutionized indus-

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try. Mass production became the rule, production managers and scheduling and routing and all the rest came into being. The tempo of business accelerated, and accelerated to a maddening whirl. Business went cost-conscious. Competition became keener and keener. And the patient, serene bargaining was replaced by alert, snap-judgment decisions which must be nearly 100% right. A purchasing agent became not merely a buyer, but also an officemanager, a specialist in commodities, in some cases an engineer, a bit of a cost accountant.

Such changes could not help but bring changes in the purchasing personnel. More knowledge was required of the purchasing agent, and more responsibility placed upon him. He became a more important personage, and logically had to be a better and more-informed one.

That, perhaps, is the picture today, and the purchasing agent has kept pace. But the end is not yet, and I want particularly to call your attention to the new demands on the purchasing agent of today. Who ever dreamed that a buyer might offend the law by getting a better price than his competitor? The Robinson-Patman Act accomplished that. Until the last few years, was there ever a suspicion that a buyer might be held for his vendor's faults or be liable for his liabilities? Yet today a growing crop of protective clauses on purchase order forms witnesses the fear that such may be the case. We might go on enumerating instances of such phenomena. Suffice it to say that the purchasing agent is today perforce interested in legislation and court decisions and the acts of administrative boards. He bids fair to have to add to his already lengthy list of accomplishments the ability to be a fair lawyer.

The next point to which I would briefly call your attention is the new tenseness of the purchasing task. No longer do economic swings rise and fall with decades in every swing. It is hard to realize the fact, but it is true that in twenty years we have seen four depressions and four peaks of business. The

war-time hysteria; the post-war slump of 1918. The glorious post-war peak of 1919–1920; the hard times of 1921–1922. The grand upswing from 1923 to 1929 with the all-time high as climax; the Great Depression of 1930–1933. The Recovery of 1934 to 1937; the present euphonic Recession. The economic ferris-wheel is speeded up to a breath-taking rate of ups and downs.

No need to relate the effect of this upon purchasing. You know it too well. Too small a stock; too high an inventory. Emergency deliveries; cancellations. Hectic buying; lay-offs and the doldrums. And the purchasing agent must meet each turn of the tide. How can he do it except by following the economic picture daily? He must be not only a buyer and a lawyer, but an economist of sorts.

The third item is what I will call, for lack of a better name, the socialization of purchasing. This is less evident, perhaps, than the other factors I have mentioned. But it is very real. There is significance in the fact that governmental leaders talk in terms of "purchasing power." It is interesting, to say the least, that government has striven, and is striving, to solve its social problems through purchasing practices. Witness the Vinson Act, the Walsh-Healey Act, the proposed legislation enforcing labor standards on all who seek government contracts.

Business may well wonder if it does not stand on the verge of an era in which the soundness of a buying policy will depend, not merely upon the profit it works on the particular transaction, but upon the far-reaching effects it may have on general welfare. And the purchasing agent may contemplate with some concern the prospect that his buying will be weighed on still another new scale, which will call for a new type of knowledge and of judgment upon his part.

If all these things are so, what does it mean to us as purchasing agents? It means new responsibilities, a new prestige, and new brands of knowledge. Are they to

be gained by experience alone? That is, by the rugged old-fashioned type of experience we have in mind? I think not.

At the outset of this paper, I asserted with conviction that no educational background could fit a man for purchasing success without practical experience to buttress it. Now I want to contend for the obverse statement that practical experience is not enough without education. But bear in mind still that I am not referring to the education that necessarily comes from school or college. Rather, I refer to that broader definition of education that includes the search for knowledge from all available sources.

Obviously, one can learn by experience only of those things that one has experienced. And the political phenomena, the economic developments, the social implications of today are brand new. Congress may in a session render valueless the tactics learned by a lifetime of very practical experience.

Therefore, I say that the very nature of the purchasing task of today is calling for a student type of purchasing agent. I can imagine no preeminent success in the buying field that is not based upon continual application to the learning of modern purchasing. I cannot visualize a truly successful purchasing agent who is not continually informing himself about the developments in Washington, about the industrial and labor and merchandising legislation proposals that are before all State legislatures. I can see no place for the buyer who does not follow daily the economic developments and seek the best written advice he can obtain. I am sorry for any man, purchasing agent or not, who is not keen to absorb all he can about the directions in which we, as a nation and as a world, are heading.

And that is not all. To be in the swim in days like these, it is essential to check up on our own methods and our own policies continually. Along with the rest of the world, purchasing agents have progressed. It is a part of the job to know what

is happening in our own profession. And our own experience is no sufficient guide in that respect. I think of the ideal purchasing agent as ever inquiring, "What is somebody else doing better than I am doing it?" Any other attitude is stagnant.

Nor is it only the new that is of value to the purchasing agent. The old fundamentals still hold, even in changing times. And sometimes we get away from them without realizing the fact. So it pays, now and then, to look back and to check up on policies and methods and procedures and forms and all the rest to be sure we have not slipped.

Purchasing is a profession today. I do not believe it always was. Once it was just a trade-and a clerical trade, at that-to be practised, like laying bricks, by the development of individual skills through actual experience. That day is gone, and gone forever. No mere artisan skill, or shrewdness, or trading propensity is sufficient equipment for the modern purchasing agent. Professional men, by their very definition, are distinguished by specialized knowledge, high ethical standards, and serious responsibilities. Purchasing, on these factors, rates as a profession.

Practical, personal experience is a grand teacher. But there is too much for us to learn and too short a time in which to learn it in that way alone. Only by the pooling of the experience of the many for the ready reference of all can the best results be obtained. The National Association of Purchasing Agents is working toward that end. The exchange of experience at local association meetings and in conventions is one means to the end. The services of the National Office, the Bulletin, all the local periodicalsthese are others. The plans of the N.A.P.A., by which every member will receive between now and the end of 1940 a Handbook of Commodity Data Sheets (now ready for distribution), a Handbook of Purchasing Policies and Procedures, a Handbook of Commodity Research Studies, an authoritative revised Textbook on Industrial Purchasing, and a Handbook of Practical Purchasing Law is still another, and, I believe, a tremendously important contribution.

We look forward confidently to

the future of our profession—to a better informed, more far-visioned, more respected, more highly capable and more deeply responsible purchasing agent.

Mechanics of Purchase Transactions

E. H. WEAVER

Union Oil Company of California Los Angeles

Sales managers frequently caution salesmen that the sale is not a real sale until the merchandise sold is satisfactory to the customer and the cash is in the till. The purchasing department, while not charged with the responsibility of actually making the payment, likewise should not consider the purchase a complete transaction until the using department has received the material, is satisfied, and the invoice is approved for payment.

The mechanics of purchasing procedure involve the steps covering the receipt of the requisition, relations with other departments, editing the requisition, checking it against surplus or salvage stocks, negotiation (which includes proper specifications), the call for prices, relations with suppliers and their representatives, determination of the proper quantity, price and quality, legal and traffic problems, trial orders and samples, award of the business, inspection, follow-up or expediting, delivery, guarantee, invoices, adjustments, and then the final operation, that of the proper records for the future. Although this just about covers all of the operations of an extreme case, and it is not expected that every purchase will pass through all of these stages, each purchase transaction requires some or all of these steps to provide for satisfactory operation.

It is obvious that many of these operations are elementary and that

most purchasing men have long since worked out the system best suited to their particular business. It is not my purpose to consider them unimportant, but rather to consider and discuss the less common methods of procedure.

The prize winning paper of Joseph D. Yoder of the Wharton School of Finance and Commerce of the University of Pennsylvania, in the contest recently conducted by N.A.P.A., is a study of general purchasing procedure of twenty-five industrial purchasing departments in eight major lines of business. It reveals that although all of the departments investigated are guided by certain fundamental principles, there are devious ways in which the result is accomplished. Each of the twenty-five companies was found to have a different type of organization or procedure, some embracing a complete centralized unit in one plant or nearby scattered plants within a small radius, while others have gone to the other extreme of complete decentralization or purchasing. In all cases, however, economy of purchase is accomplished by some type of central control. Stuart F. Heinritz, Editor of Purchasing, reached a similar conclusion in his summarization of the 37 contest papers entered in the 1937 N.A.P.A. contest: contest has shown that essentially the mechanics of purchase procedure follow along pretty generally standardized lines.'

Our company's purchasing organization is a good example of de-

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centralized purchasing. In common with many other large purchasing departments, we provide requirements for hundreds of properties, including service stations, marketing plants, and numerous other types of properties common to a completely integrated major oil company. Our company's operations extend from the geologist's prospects to the delivery of gasoline to your motor car. At the head of the purchasing department is the Manager of Purchases and Stores. In addition to the head office purchasing organization there are three district purchasing agents at central points, having considerable authority. Then there are certain storekeepers at other important locations having limited buying authority as prescribed by the head of the department. To take care of certain peculiar problems we have in effect several short cuts which have proved very successful in eliminating much detail, yet giving us a very effective control over requirements of these plants.

The first system I shall mention is primarily for our system of service stations. We were not the pioneers of this method, but I have not heard of its general use. For resale and maintenance each station requires approximately 450 items which were formerly supplied from central warehouses, in addition to many special items which were not handled through the warehouses. All of the usual problems of warehousing made this handling quite expensive. In the new plan, all of these local service station warehouses were discontinued, with the exception of the warehouse at the head office city which handles other departments was well. At important centers we then arranged with competent jobbing houses to handle this function at prices and terms mutually satisfactory. The purchasing department and the service station division then approved a list of standardized items against which each service station manager is authorized to issue a purchase order direct to the vendor on a special form provided for this purpose. Invoices are handled through the same manner as those for general purchase. Four years experience with this system has proved that it saves a great deal in the elimination of much purchasing department handling, as well as avoiding the many pitfalls of warehousing. Our chief function in this arrangement is to keep in close touch with the suppliers for the addition and discontinuance of approved items, keep prices in line, and handle matters of policy or adjustment.

Another uncommon system is what we term as the "Local Purchase Order." In common with many other corporations, we have in the field a number of construction crews, traveling mechanics and others traveling from place to place for one reason or another. On new projects or repairs the headquarters or division managers provide bills of material for the major requirements which may be planned in advance. Under the old system, on the many unforeseen local purchases it was necessary to handle them through the purchasing department on the regular form of requisition and purchase order and in many cases we were merely confirming materials already received. Much difficulty was experienced in securing approval of documents because of the continual movement of these crews, which in many cases delayed final payment to the vendor and caused much ill will, misunderstanding and correspondence.

To correct this, a new form was designed to permit each foreman or other authorized representative to issue such orders, with certain limitations, in favor of local suppliers. The important feature is that the vendor is handed two copies of the order, the duplicate being retained by him and the original attached to the invoice and sent direct to the main office. Instructions provide that our representative may only issue such orders for the items actually received, and his signature on the copy of the order attached to the invoice is prima facie evidence that the merchandise was received and the prices appearing on the order are correct. No further approval is required to handle such invoices for payment. Abuse of the system is avoided by a careful scrutiny of the items ordered by a requirement of sending a copy of the order to the foreman's superior. Also the purchasing department reports any irregularities as to price and materials and any other departures from good purchasing practice.

This special form has been extended to other types of purchases, such as automobile and machinery parts and other commodities where prices and sources of supply are pretty well established and where nothing is gained by handling such purchases through the purchasing department. In many cases they are issued against blanket orders or contracts arranged for by the purchasing department.

Large purchasing departments are faced with the necessity of providing a system for keeping scattered buyers and personnel properly informed as to commodity information, specifications, price data, contracts, special arrangements and other related subjects. For this function, there is now quite generally used a system of buyers' manuals or guides, and the wise and consistent use of such a guide pays good dividends in simplification and uniformity of operation.

A difference of opinion exists as to whether buyers should specialize on specific commodities or divide purchases by plant or area; the particular business of course, in some cases, will of necessity dictate the decision. Our company has always favored a combination of the two systems, and our buyers' manual has been of great assistance in support of our method. Each buyer is assigned certain departments, which plan is, in a measure, semi-specialization, as some of the branches of our operations have a peculiar nomenclature, such as marine, pipe line, refinery, drilling, etc. In the case of certain commodities which are common to all departments, such as valves, fittings, hardware and steel products, these are delegated to a buyer having experience in the particular field and he negotiates and completes the transaction. This information is then transmitted to all interested through the manual. This plan has avoided the possibility of duplication on common items where a number of individuals are continually buying the same commodity.

Another step in purchasing procedure during recent years has been the preparation by some large purchasing departments of a brief form of text book entitled "Purchasing Procedure and Regulations." This

differs from the manual as it is confined to general policy, organization, relations with other departments, legal, relations with sellers, quality, quantity, price, trial orders and samples, contracts, and other subjects of special interest to the individual company. This medium provides an excellent vehicle for informing other departments and the management regarding the purchasing function. To some this may be interpreted as propaganda; whatever it is, it is my honest con-

viction that wise repetition in selling the purchasing function to other departments and officials should be practised. It seems, for some unknown reason, that almost every purchasing agent is constantly placed on the defensive in securing the cooperation of other departments. Good purchasing procedure should include some form of honorable salesmanship aimed at selling the purchasing function to those whom we serve as well as those from whom we purchase.

Receiving and Invoice Procedure

Receiving consists essentially of taking physical possession of purchased materials and supplies and transferring them to the point of use-with incidental reporting and notification of the proper individuals, to enable inspection and the recording of important factual information. If the receiving department is efficiently organized and adequately equipped, and a definite procedure is outlined, this routine can be carried out smoothly, without loss of time, and with a minimum of thoughtful supervision. If, on the other hand, the receiving function is not properly organized and its operation haphazard or uncontrolled, goods may lie in the receiving department for two or three days while production is delayed awaiting them, or inspection may be overlooked and goods put into process only to find that they are not of satisfactory quality or size, and that labor and other materials have been wasted upon them, time has been lost, and perhaps hope of rejection and replacement by the vendor has been forfeited.

It is obvious, therefore, that receiving is vital to the purchasing function, and that a purchase has not been completed—that the goods cannot meet the requirement for which they are intended—until the receiving procedure has been ac-

complished. Incidentally, the payment of the vendor's invoice is also frequently conditioned upon the satisfactory receipt of the goods, and a delay in reporting receipt (and inspection) may result either in a loss of cash discount and possible impairment of credit or, if the invoice has been paid regardless, in difficulty in obtaining replacement or adjustment for unsatisfactory merchandise. Receiving is a routine type of operation, whose prompt and efficient performance make for and contribute to a smooth, well-ordered purchase cycle.

A survey conducted in 1935 by the N.A.P.A. Committee on Purchasing Department Organization and Procedure indicated that the purchasing department was charged with full or partial responsibility for the receiving function in 47% of the companies reporting. The responsibility was complete in 43%. The lack of any conclusive majority, either for or against purchasing department control, suggests that in many cases, particularly among the smaller companies, the capabilities of personnel influenced the allocation of responsibility for the receiving function.

The first concrete consideration in the receiving procedure is the question of prior notice of the expected arrival or purchased materials. Is the receiving department to have notice to enable planning



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for the arrival and handling of the goods, or are they to be allowed to arrive entirely unannounced? If we admit the desirability of giving notice, there arises the question of how it is to be given—by copy of the purchase order, by shipping notice or loading tally from the vendor, by copy of vendor's invoice, by arrival notice (or freight bill), or by a special form or report. Are the quantities to be deleted from any notices to the receiving department, to insure a definite count?

There may be occasional direct deliveries to, or pick-ups by, using

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departments. How can checks be provided to insure their reconciliation with the established system?

The manner in which inspection and testing are provided for in the receiving procedure is very important to the maintenance of quality and to the expeditious handling of inbound materials. Just how is inspection to be arranged for? Will the receiving department notify the inspection department, and are routine checks provided to prevent overlooking such notice? Perhaps the receiving department may be authorized to draw samples and submit them to the inspection department. What disposition is made of the goods pending the completion of any tests? Presumably, the receiving department is responsible for quantity, and this may, as previously suggested, involve a blind check or merely a verification of the quantity stated in the prior notice of the expected arrival. What amount of over or under-delivery is acceptable, and how can it be ascertained if the quantity received is determined without knowledge of the quantity ordered?

How are the receipt and acceptance of purchased materials reported to the purchasing department? Does the using department approve them in any established manner? How are the goods actually delivered to the using department? What disposition is made of them if unsatisfactory, and how is any cost of extra handling or return taken care of? One of the best assurances of the inclusion of each step in the complete receiving procedure is the careful selection and drafting of as few and as simple forms as possible, to completely cover the notices and reports necessary. Wherever possible, a form should be so designed as to require the performance, and afford an independent check, of prior steps.

Unlike receiving, invoice handling is quite generally recognized as functionally a responsibility of the purchasing department. In the 1935 survey previously referred to the

purchasing department was reported as checking vendor's invoices completely in 75% of the companies and partially in the remaining 25%. The operations most frequently reported as performed by other departments—usually the financial or accounting department—were the checking of invoice extensions and the checking of the receipt of the goods covered.

The invoice is, of course, checked for compliance with all the terms shown on the purchase order. The F.O.B. point and cash discount must be, if not shown, copied onto the invoice to insure proper payment. A re-check of quantity is afforded, but any discrepancy should have been taken care of before the goods left the receiving department. While it may be too late to refuse an excessive overdelivery, the vendor can be called upon to make up an unreasonable shortage, or followed-up for completion in the case of an obviously partial delivery. How is the price to be checked if it is not stated on the order? If the commodity has been previously purchased, the price charged may be compared with that last charged or quoted and any difference approved by the buyer in the light of his experience and knowledge of price trends. In unusual circumstances it may even be considered desirable to obtain check quotations.

Must the goods be received and inspected before the invoice is approved for payment? If so, what provision is made for taking advantage of any cash discount if the goods have not been received, or if their quality has not yet been determined or is in dispute with the vendor? Failure to provide for unusual or out-of-routine occasions may prove very troublesome and, at times, costly.

Transportation charges present several distinct problems in checking the invoice. Is the rate correct—and the lowest available for the commodity and service involved? Was shipment made in accordance with the terms of purchase? If the merchandise were purchased prepaid but actually

shipped collect, does the invoice allow the transportation charges—or are they arbitrarily deducted before the invoice is paid? Broader implications of transportation charges have to do with their relation to the total delivered cost and to the time required and convenience of delivery. Advantage should be taken of the opportunity of analyzing the cost and methods of transportation and recording all significant facts in appropriate purchasing department records.

In connection with the checking of details of the invoice, definite methods of procedure should be prescribed for handling necessary corrections and adjustments with the vendor as promptly as possible and with a minimum of correspondence. It is desirable, whereever conditions permit, to make any corrections in the invoice prior to entering it in the accounting records of the company. Further steps include checking extensions, auditing, vouchering, and paying. To facilitate these final operations, and as a check of the approval of various phases of the invoice, each check is usually noted on the face of the invoice, either in the "Buyer's Section" provided in the upper right hand corner of the Simplified Standard Invoice form or on a special form attached to the invoice or stamped on its face.

Throughout both receiving and invoice procedure every effort should be made to provide positive independent checks, step by step, to insure proper attention to every detail of the prescribed routine, and to minimize the effects of human errors. Full advantage should be taken of the numerous opportunities to accumulate in the purchasing department valuable experience records. If procedures are intelligently developed along these lines they are easy to follow and the maximum efficiency of personnel may be expected. Smooth and efficient performance of receiving and invoice handling facilitates and simplifies purchasing routine and promotes harmonious relations throughout the buyer's organization and between buyer and seller.

The Purchasing Department Library

It is one of the prime functions of the buyer to know how to find at short notice information on every conceivable subject, and the efficiency of his department is often judged by his ability to do this and to do it quickly. To accomplish this he must rely on:

- His own knowledge of materials, which must be a wide one.
- 2. His knowledge of salesmen and sellers who can supply him with information.
- His intimacy with and knowledge of other buyers who may be able to help him.
- 4. His own records.

His library is an important part of his records. In its broadest sense his library might include all of his records for in his own mind he does not segregate one part of these records from another, but when in search of information he turns to that part of it which his experience has taught him will be most likely to bring results. His library then must cover a wide selection of subjects and it is often a collection that it has taken years to accumulate.

No collection of books or pamphlets or information is of much value unless wanted items can be readily found, so that the first requisite is a cataloguing system to be built up as he accumulates the items for his library. Obviously his problems arrive in different ways. He must get information about a definite article or perhaps he must find an indefinite article to accomplish a definite purpose. He may be asked to buy an electric refrigerator or he may be asked to solve the problem of keeping food supplies from spoiling. Or again he may want to know whether a certain company sells refrigerators or what make they handle.

The Index

So his library must be catalogued, indexed and cross indexed—indexed by subject and indexed by

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the names of the sellers. To index by subject, listing each item alphabetically may be a satisfactory method if the items upon which the buyer must have information are limited in number, but for anyone purchasing a wide variety of articles the task of making such an index would be monumental and his index would assume the proportions of a dictionary with many thousands of entries. In most offices this is impractical and short cuts must be found. Two are suggested which if both used together will be found satisfactory if not quite perfect.

- 1. An alphabetical index of his most common purchases. To those who keep a price file, this might serve as an index, though it will only show the names of sellers from whom the company has bought or obtained quotations, and unless some method be devised to enter the names of new sources of supply their names will be forgotten and buying will tend to become frozen.
- A classification of all articles under a limited number of headings so that every possible item or groups of items can be assigned places. A sample of such a Classification follows:

HEADINGS:

Animals
Animal Supplies
Automobiles
Gas Tanks
Motor Trucks
Snow Plows
Supplies & Repairs
Tires
Books & Publishers
Bookbinding
Machinery
Supplies
Building Materials
Architectural Ornamentation
Etc. 27 sub headings

Caretaking & Supplies Etc. 15 sub headings			
Chemicals with	7	suh	headings
Coal & Fuel	3	11	er er
Cork	1	66	**
Dental Supplies	î		
Dry Goods	4	46	44
Electric	10	44	44
Filing	3	66	4.4
Food	18	**	8.6
Furniture	32	××	4.6
Glass	11	8.6	11
Hardware	16	**	**
House Furnishings	13	66	44
	11	**	11
Jewelry	-	4.6	44
Lumber	16	**	**
Machinery	14	**	13
Machinists & Supplies	30	**	15
Magazines	4		**
Maps & Charts	10		44
Materials	19		*1
Mill Supplies	7		15
Miscellaneous	10		**
Office Machines	10		**
Oils & Greases	4		**
Packings & Coverings	7	**	**
Paints	13		
Paper	19	"	11
Photographic	19		11
Plants Seeds & Grains	11		**
Plumbing Supplies	19		44
Printing "	9	6.6	44
Rubber Goods	5	**	
Scientific App.	51		6.0
Services	22	6.6	**
Sporting Goods	4	6.6	**
Stationery	12	**	44
Steam Fittings	13	6.6	4.4
Wire	6	6.6	**
Total	12	hea	dings
Iotai			headings
	010	SUD	neadings

In my own case I spent a month making this index and handled 30,-000 bills in order to do so, placing each bill under an appropriate heading where I expected to be able to find it if needed.

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No one classification will fit every buyer's needs and it is advisable that each buyer makes his own. One buyer might not need the "Animal" heading but should have one for "Foundries." Another might require "Dry Goods" to be divided into a dozen major headings such as Silk, Cotton, Wool, Rayon and

Address before the National Association of Purchasing Agents, May 25, 1938, at St. Louis.

again into Broad Fabrics, Narrow Fabrics, etc. With the best made subject index of this type there will be some difficulty. Are tires Automotive or Rubber Goods? Is a refrigerator House Furnishings or Electric Appliances? Suppose it is gas or the old fashioned ice box, then the index might have refrigerators scattered in three or four different classes, and perhaps there should be a major heading for Refrigeration.

Common sense, cross indexing, familiarity with your own file, a special filing and finding clerk, all of these will help make such an index practical. It should not be necessary to cross index every conceivable item in your list; when an index or a cross index becomes too cumbersome it loses much of its usefulness. The form of this index file depends somewhat on its size; the larger ones are more convenient

if of the visible type, the smaller ones can sometimes be loose leaf books.

Contents

In its largest sense the P.A. Library should list anything and everything that will help the buyer in one of his chief problems: "Where and how will he find out everything he needs to know?"

Catalogues, of course, form the greater part of this collection, and



The N.A.P.A. Executive Committee, 1938-1939

Seated, left to right: ERWIN H.
DOHT, Purchasing Agent, Mallinckrodt Chemical Works, St.
Louis, Vice President, District 3;
GEORGE P. BROCKWAY, Manager of Purchases, American Optical Co., Southbridge, Mass., Vice President at Large; Joseph W.
NICHOLSON, Purchasing Agent, City of Milwaukee, President;
F. H. MISSIG, Division Purchasing Agent, Aluminum Co. of America, Detroit, Vice President, District 4;

BERNARD H. YARDLEY, Purchasing Agent, Stanley Works of Canada, Ltd., Hamilton, Ont., Vice President, District 5.

Standing, left to right: John E. Connor, Purchasing Agent, National Equipment Co., Springfield, Mass., Vice President, District 9; CLIFFORD J. ALEXANDER, Division Purchasing Agent, Shell Petroleum Corp., New Orleans, Vice President, District 7; Thomas D. Jolly, Director of Purchases and

Research, Aluminum Co. of America, Pittsburgh, Vice President, District 6; WARREN W. IRWIN, Purchasing Agent, Strong Memorial Hospital, Rochester, Vice President, District 8; C. S. WORLEY, Purchasing Agent, Consolidated Gas & Utilities Corp., Oklahoma City, Vice President, District 2; J. F. MEYER, Purchasing Agent, W. P. Fuller & Co., Portland, Vice President, District I.

these are of all sizes and shapes but there are manyother books and pamphlets and records which must be made available also:

Catalogues large enough to file in bookcase Catalogues and pamphlets, small enough to file in drawers

Single sheets, reports, interviews with salesmen and matter small enough to require to be filed in folders

Requisitions Bills
Orders—live Price records
Orders—dead Quotations
Miscellaneous

Specifications
Own specifications
Government
A.S.T.M.
Navy

Army Indexes of Specification as published by other organizations

Any others

Government Publications

Published indexes of Government Publications

Buyers Directories Dictionary Technical Dictionaries

Dental Medical Chemical

Any others Language Dictionaries Encyclopedia Engineering Hand Books

Chemical Hand Books Engineering Catalogue (Sweet's)

Post Office Guide Business Forecast Services Association Reports and Material Researches—Data sheets

Commodity Studies Trade Magazines Technical Books

Coal Guides
Raw Material Guides
Descriptions of Processes
Descriptions of Manufacturing
Descriptions of Materials
Studies of Soils

Studies of Insect Pests Any other studies Price Books and Price Services

Tariff Act
Customs Service literature

Freight and R. R. Guides and Maps Cable Codes

Copies of State & Federal laws affecting

business and prices
Reports of proposed State & Federal
Legislation affecting business and
prices

Competitors' Literature Own Literature Own Reports Treasurer's

Others Scrap Book of Printed forms Scrap Books on Misc. Subjects Photographs

Records of Salesmen's Names

Samples Industrial Purchasing, by Howard Lewis

Arrangement of Contents

In hunting for information in your Library it is a saving of time and money if you know where to look.

Obviously this arrangement can vary widely from the needs of the small one-man office where the buyer puts the few items most frequently wanted within reach of his hand and remembers where the others are, to the requirements of a large buying organization where the information must be systematically arranged so as to be available for a number of different users. We assume and describe the systematic arrangement for a large organization which can be modified as required for smaller units, and we assume that the buyer's office space is limited; that there is not shelf space to give a section to each subject, and not filing cabinet space to give a drawer to each subject. Nor would it be desirable to do so. Compactness is desirable not only to save office space but to facilitate finding. Books and catalogues in book form are of all sizes and shapes, and as a rule there are not enough on any one subject to warrant a section devoted to that subject, a section which must have narrow spaced shelves for the small books and wide spaced shelves for the big ones. It is impractical then to arrange these by subject; they automatically and inevitably arrange themselves by size and shape.

Again much of the information is not in book form but in pamphlet, folder or sheet form which cannot be placed with the books. These smaller folders and sheets are legion; a card index of them would be too cumbersome, and they in turn require to be arranged by subject. We find then that our material divides itself into four groups.

- Books of a size to go on shelves and arranged according to size.
- Folders and sheets not worth indexing and to be arranged by subject.
- Border line material in the form of pamphlets which cannot be well stored on book shelves, some of which we would like to index and classify with the books, and
- 4. Some of which should preferably be classified by subject and be placed with the folder and sheets of group 2.

- 1. Books. These then are arranged by size on the shelves, each shelf being numbered or lettered and the books arranged alphabetically on each shelf. The book and the index card are both marked with this shelf number or letter and if desirable each book can be numbered individually, and have its definite location on the shelf.
- 2. Folders & Sheets should be filed in manila folders in the Subject File which should be a sufficient series of drawer files to accommodate the collection, (legal size, to hold 9 x 15 is the most practical) and each folder placed behind the guide card of the subject covered. There should be a manila folder for every heading and subheading of the subject file list.
- 3. Border Line Material, pamphlets, etc., which should be catalogued with the books but cannot be arranged with them should be filed alphabetically in vertical filing drawers (legal size). They can if desired be given numbers as in the case of books. The catalogue card should indicate by some symbol whether the item is on the book shelf or in the vertical file.
- 4. Border Line Pamphlets Not Catalogued, should be filed in the subject file with the material as in No. 2, in the proper manila folder.

The library catalogue index, covering Groups 1 and 3, which is originally alphabetical by the firm name, or the book name, and which shows where and how each book or pamphlet can be found, should next be cross indexed by the making of a complete duplicate index listing each catalogue under the subject which it covers. It will be found, of course, that many catalogues cover a great variety of items and must be listed again and again in this subject index so that each card will show all the sources of supply of that subject and all of the information available on that subject. Thus, when the buyer wishes to look up Typewriters, his catalogue card under the heading Office Machines, Typewriters, in the subject index of Groups 1 and 3, will show him the names of all the typewriter companies of which he has catalogues and where they can be found and the manila folder under the same heading in his subject file drawer covering Groups 2 and 4 will show him all the miscellaneous unindexed memoranda on the subject. His bills,

price records and dead order file will show him what has been done in the past. His manufacturers' directories will show him what exists that he has not got in his files and his list of salesmen's names will show him whom to ask for further information. If he still feels that the ground has not been covered, perhaps one of his fellow purchasing agents can be called on to help him out.

The Present Status of Reciprocity as a Sales Policy

HOWARD T. LEWIS

Professor of Marketing
Graduate School of Business Administration
Harvard University

The USE OF RECIPROCITY as a basis for obtaining sales is a practice of long standing, the essential soundness of which has been argued pro and con at great length. It is not the purpose of this study to reopen the controversy, but rather to consider the present status of the practice and some of its ramifications. A part of the data upon which this discussion is based was obtained from 251 replies to questionnaires: 176 from purchasing officers, 43 from sales managers, and 32 from general management executives.

It is probable that the policy originated simply from a desire to increase goodwill. Quality, service, and price being equal, it was natural for a company to distribute some of its orders for materials and supplies among its better customers as a friendly gesture of appreciation, realizing that at no added cost to itself it might thereby strengthen the good relations already existing. A great many companies still follow the practice only for this purpose. There are many others that refuse to practice it even to this extent, because they are not satisfied that in the long run it is essentially sound. Others do not feel the need of it, as, for instance, those who do a large amount of special-order business, have an outstanding reputation for service, or sell a product widely recognized as definitely superior.

On the other hand, more and more companies have come to use it as a basis for soliciting and even demanding orders. Thus a definite issue as to policy has developed. Should sales depend solely on the ability of the sales force to obtain orders without any assistance from the purchasing department, or should the purchasing power of the company be used as a means of increasing the sales volume and presumably the net profits of the company even at some added cost or sacrifice at other points?

Whatever the implications involved in this controversy, it does appear, from such evidence as is available, not only that the sales volume sought on this basis today is substantially larger than in 1929, but that it is growing steadily. There are several reasons for this increased popularity, among which may be mentioned the effort to maintain sales volume during the depression; the apparent success with which some companies use reciprocity to increase sales; and the belief that, under competitive conditions as they prevail in some lines

of business, a company must resort to reciprocity in order to survive.

It is apparently true, moreover, that to a greater or less degree reciprocity is found in nearly every type of manufacturing business as well as in banking institutions and insurance, public utility, transportation, and construction companies. For instance, public utility companies commonly buy as largely as possible from local suppliers in order to develop the goodwill of the community which they serve, both toward the companies themselves and toward the services they sell. This is clearly a form of reciprocity. But one such company writes, "We try to hold these purchases down as much as possible but believe the goodwill obtained more than offsets the difference in price we are compelled to pay."

Address before the National Association of Purchasing Agents, May 26, 1938, at St. Louis.

As has been suggested, on the other hand, those who practice reciprocity are often not content to use it merely as a gesture of goodwill, and the public utility field is no exception. To illustrate, a public utility which purchased gas ranges from a particular manufacturer brought sufficient pressure upon this supplier to induce him to discontinue the manufacture of his own electrical energy and the use of fuel oil in japanning ovens and instead to purchase the electrical energy and to substitute gas for fuel oil. Banks, like public utilities, practice reciprocity, although seldom will either admit it openly.

It is among manufacturers of industrial goods, however, that the practice is most common. It appears to be particularly prominent among manufacturers of machinery and other iron and steel products, electrical supplies, paper and printing, chemicals (including paints) and non-ferrous metals, petroleum, and rubber. The extent to which the practice is sometimes carried is well illustrated by the following comment received from a purchasing officer:

"We manufacture only freight equipment, such as box cars, gondola cars, flat cars, and hopper cars for the various railroads which may be good enough to place their orders with us.

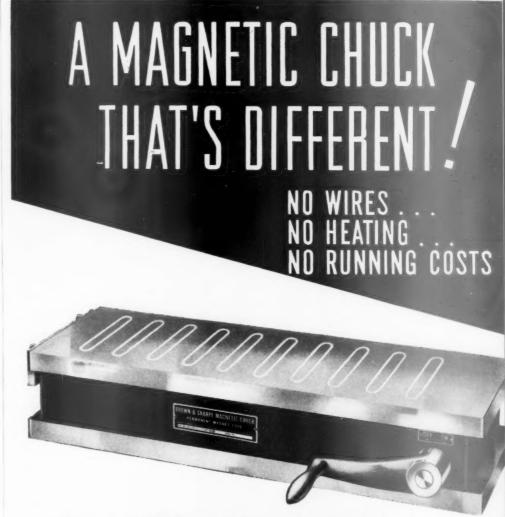
"During the last several years, due to the reciprocal turn of mind of both seller and buyer, almost all the material used in car construction has been allocated by the railroad for which the cars were being con-structed. The real function of buying has been eliminated, and all competition has been voided as far as our own company is concerned. In one instance we received an order for 500 hopper cars, involving 5,600 tons of steel, and were requested by the railroad to split this be-tween seven different steel producers, ranging from 2% as the lowest amount to 45% the highest."

A comparison of the attitude of purchasing officers, sales managers, and general management toward this practice reveals some interesting facts. It is safe to say that a great many purchasing officers disapprove of reciprocity on the ground that it violates the essential principles of sound purchasing. Certainly an overwhelming majority of buyers would oppose its use when it is forced upon them against their will, or when it involves some sacrifice in quality, service, or price. Many, however, would accept "friendly relations" as a fourth factor, provided all other considerations are equal and provided the purchasing officer himself is the judge as to when and where to use it.

In view of a general feeling among purchasing men that such "unholy alliances" are forced upon them by the sales departments, it is interesting to note the attitude of the latter group. Only 41% of the sales executives replying to the questionnaire recorded themselves as favoring the policy, whereas 62% of the representatives of general management (as distinct from both purchasing and sales) responded as endorsing this method of obtaining sales

In this connection, too, the purposes for which the use of reciprocity was approved may be noted. About 82% of the sales and general management replies indicating approval of the practice endorse its use as a means of obtaining "a share in a company's volume of purchases when [its] price and quality are competitive." The remaining 18% admitted that they would use reciprocity for this purpose when their

Continued on page 56



Brown & Sharpe Magnetic Chucks, Permanent Magnet Type - -

have the advantages of electromagnetic chucks, but do not require any electric current-electrical connections, wires, switches and auxiliary generators are all eliminated. The chucks have long life and full holding power and do not heat under any conditions. Ask for Circular. Brown & Sharpe Mfg. Co., Providence, R. I.

JUNE 1938

BROWN & SHAR

Metallurgical Research Opens New Fields for Industry

We are inclined to speak in very boastful fashion of the "American Standard of Living." How many of us realize that, according to this American standard, 70% of the twenty-seven million American families have an average income of a little over a thousand dollars a year, of which they spend more than half for food and clothing. This average American family is far better clothed than that of any other nation, with the possible exception of two or three of the small, but relatively wealthy, countries of Europe such as Sweden, Holland and Switzerland. On the other hand, the average American family lives in a home which is a disgrace to this or any other civilized country. The argument need not be pressed further, for it is obvious to anyone who will trouble himself to walk through the slums of any American city, that if American business has an outstanding opportunity, it is in the direction of providing homes for 75% of our citizens.

Of all the products of man's activities, home building shows the least progress. The small home of today is built of almost the same materials as was the small home of a thousand years ago. Its construction is carried out in very much the same manner as was the construction of a home in Elizabethan England. Quantity production, which has made the American diet and clothing luxurious beyond the dreams of a century ago, has scarcely been felt in the construction of homes. In the equipping of homes, we have done a great deal better. Tens of millions of domestic refrigerators, radios, bathtubs, etc., have been installed in homes so dilapidated that the effect is little short of ludicrous.

Address before the National Association of Purchasing Agents, May 23, 1938, at St. Louis.

DR. A. A. BATES

Manager, Chemical & Metallurgical Division Westinghouse Electric & Mfg. Co. East Pittsburgh

Within the last ten years have come two developments in the chemical and metallurgical engineering which make the quantity production of low cost, but fully modernized homes feasible. These two developments are, respectively, the continuous rolling of wide steel sheet and the development of cheap, effective welding methods. In its general outline, a home consists of structural materials arranged on broad horizontal or vertical planes. The modern rolling of steel sheets up to 8 feet in width and many hundreds of feet in length, provides for the first time in history, the large quantity production of a material with all the necessary physical properties, together with cheapness and amenability to simple methods of joining all of which are requisites to the low cost construction of small

It has been conservatively estimated that the adequate replacement of standard housing in the United States would require the construction of a million houses annually. At the present time, we are producing only a small percentage of this number and, with a few isolated exceptions, these are being built by antiquated methods. A modern home constructed of modern materials-steel, aluminum, glass, etc.-would be complete only when furnished with modern, domestic, labor saving devices. The provision of refrigeration, air conditioning, heating and all of the other available comforts of modern living would constitute a market so great that our present means of production would be entirely inadequate.

The American automotive indus-

try has certainly given us one of the most magnificent epics in the history of business and the rise of our American standard of living in the present century owes perhaps as much to the automobile as to any other agency. Nevertheless, we must recognize the fact that we can no longer depend upon the automobile to lead and sustain our industrial advance as it has in the past. One of the very great services which the automotive industry has done for America lies in the fact that it has forced the steel producers to devise means of rolling sheet metal on a truly grand scale.

We have here, for the first time in history, a material ideally suited to the quantity production of homes. A material which is fireproof, vermin proof, easily assembled, cheaply made, artistically satisfying, and when properly protected against corrosion, virtually indestructible. Our capacity to produce such a material, combined with the extent and pressing nature of the demand for homes, presents to business an opportunity so great and so attractive that few others in industrial history can compare with it. I do not believe that we are coming to the age of the all-steel house. It appears to me much more intelligent to presume that the building industry will take equal advantage of the greatly improved ceramic and plastic materials now available and will

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combine these with steel to re-house America.

What metals other than steel may enter into future construction? Nature has provided us with a universe concocted from 92 chemical elements. Of these chemical elements, some 60 are of metallic character. Of these 60, possibly 30 may be called industrial metals. Of these 30, 8 may be termed base metals. These 8 are iron, aluminum and manganese, nickel and copper, tin, lead and zinc. Considering the earth's crust from which we derive all of our metals, we learn that of the foregoing list, iron, aluminum and manganese are outstandingly abun-

Of the 9 elements which constitute 98% of the earth's crust, only iron, aluminum and magnesium possess physical properties which make them useful as constructional materials in a broad sense.

It is a striking fact that the metallurgist has never discovered any effective means either by alloying, heat treatment or otherwise, of materially improving the modulus of elasticity of any given metal. Apparently, nature has decided that iron, aluminum and magnesium shall be man's structural metals.

The market for steel and other alloys is today, and, no doubt will continue to be for sometime to come, a consumer's market. The consumer is making demands so rigorous that the metallurgical plants are forced to produce a much greater variety of materials than is actually necessary. There are probably ten different alloy steels in use today for every major application which the automotive engineer has on his hands. This multiplicity of production is reflected, of course, in the cost of steel.

Let me be quite clear on my point concerning the numbers of different alloys available. There are in use today something less than 10,000 different alloys. The number of alloys mathematically possible, however, runs into the billions and, of these, only a minute fraction have been studied or even made. Unquestionably, thousands of alloys Continued on page 55



The Economics of Scrap Exports

ROBERT W. WOLCOTT

President, Lukens Steel Co. Chairman, Independent Iron & Steel Producers Committee on Scrap

BENJAMIN SCHWARTZ

Director General Institute of Scrap Iron & Steel, Inc.

SCRAP IS NOT JUNK; it is an important raw material of the steel industry. On the average, steel is made from a charge of 60% scrap and 40% pig iron. Some types of steel are made from 100% scrap. In the iron foundry, scrap charges may run as high as 90%, or 95%.

There isn't an unlimited amount of scrap any more than there is an unlimited supply of iron ore, coal or other raw material. Just so much steel goes into service each year. Just so much comes back to us in the form of scrap. This in effect builds up a reservoir of scrap upon which the steel industry can draw. Just how many tons of scrap are in that reservoir today nobody knows. The steel industry has no exact figures; neither has the scrap industry. But this much we do know: When you send almost eleven million tons of scrap out of this country in four years, you are draining the scrap reservoir at a rate that will be felt when the steel industry gets back to the operating rate for which we are all hoping. If we should be confronted with a national emergency the shortage would be serious.

We recognize the right of the scrap dealer to sell scrap to anybody who will buy it, provided that the sale does not destructively affect national welfare. We have no objection to the exportation of bundled and other low grade scrap which the American Steel industry cannot use economically. Furthermore, we are asking no restriction on the exportation of scrap from those sections of the country where there is normally no demand for the scrap produced and where an analysis indicates that there is a constant and considerable supply of scrap available for this purpose. In the oil fields of Texas and Oklahoma a great deal of scrap becomes available every year. There are comparatively few steel or iron foundries in that district. Consequently, there is usually a surplus of scrap which does not move to our steel producing centers because of the long haul and high freight rates. The export of this scrap from certain gulf ports would not adversely affect our middle western and eastern steel and iron producers. We do object to the unlimited export of our better grades of scrap, because the American steel industry definitely needs it.

Last year foreign nations bought more than four million tons of scrap from America. They bought it for two reasons: they had to have it to make iron and steel; America was the only country from which they could get it. If America had some sensible restriction on the exporting of scrap, these nations, obviously, could not have produced as much steel as they have made and are making from our four million tons of scrap. They undoubtedly would have purchased more semi-finished steel and finished steel from us. It is safe to say the total would have been large enough to insure millions of man hours for American steel workers and the purchase by American steel producers of at least a part of the scrap shipped abroad.

IT IS ASSUMED, from a legislative point of view, that any Congressional action to regulate or conserve the flow of scrap in peace-time, must be based on the "national defense" clause of the Constitution, and that such action must be predicated upon proof of a shortage of supply, or dependency of this country on other nations for this material. If these conditions cannot be proved, there is no legal or economic justification for an embargo or licensing provision in peacetime.

It is estimated that there are in use today in the United States, approximately one billion tons of iron and steel articles in the various shapes required by our modern civilization, in the form of automobiles, railroads, bridges, structures, etc. This is the "iron ore mine" above the surface of the earth, which, through the service of the scrap dealer, has enabled this country to prolong the life of our iron ore reserves below the surface of the earth for future generations.

With these two vast reserves available, it is illogical to assume that the United States is dependent upon other nations, or that there is a present or apparent shortage of iron resources in the future. On the contrary, there is an annual exportable surplus of scrap which is continuously replenished and increased from year to year.

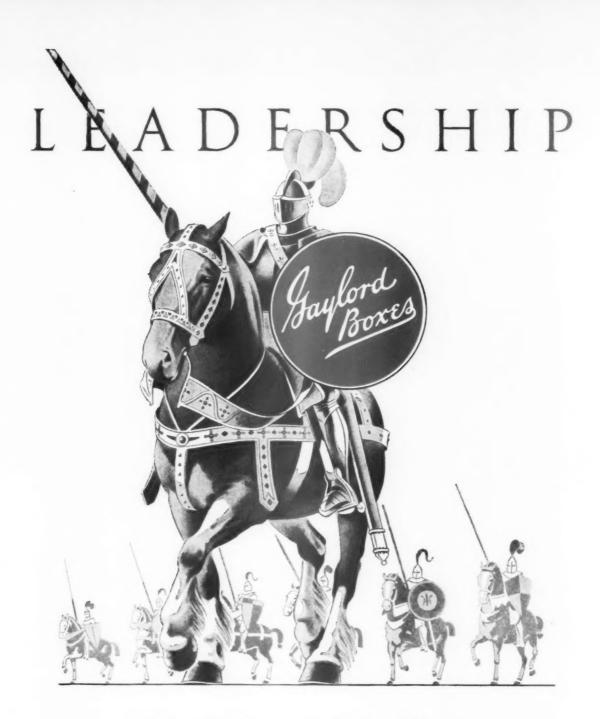
As the base of the collection machinery of the industry, there are normally approximately 200,000 peddlers or small businessmen, with their individual routes and vehicles. To this large group there are frequently added many thousands of unemployed, who find an opportunity to make a temporary living, when the scrap market permits.

It is estimated that there are approximately 15,000 retailers and wholesalers of scrap materials, through whom the small accumulations are classified and prepared into carload lots for market. In addition, there are approximately 50,000 workers employed in the yards and warehouses of these establishments, for preparation and classification into the 75 specifications of scrap iron and steel that have been established by the U. S. Department of Commerce.

In trying times of unemployment, it should be pointed out that the scrap industry has done more to save the taxpayers' money, by giving gainful employment to a large body of unskilled laborers, than any other industry in the United States.

In the category of industrial raw materials, which may be partly used for war requirements—including cotton, oil, copper, chemicals, wheat, nickel, tin, manganese, rubber, pig iron and finished steel—scrap is the least important. This is substantiated by the fact that scrap is not even on the list of strategic and critical war materials of the War Department!

For the best interests of our own national defense, the maintenance of free and open markets for scrap is vital.



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How Recent Chemical Developments

Affect Business

DR. HARRISON E. HOWE

Editor, Industrial and Engineering Chemistry Washington, D. C.

Before we can consider the possible effects of some recent chemical advances upon industry in general, it is well to recall something of what the chemical industry is. For the purposes of our discussion it may be defined as that industry which produces an element, a compound, or a mixture of things by processes which involve the application of chemistry, which means that in these processes the materials undergo a change in composition. In contrast there are many industries in which the materials involved are subject to a physical change, as when a watch or a trip hammer is manufactured by changes in the size and form of metals and other materials in-

It is also well to remember that a great majority of items produced by the chemical industry never reach the consumer as such, but are delivered as semifinished goods to another industry. That is why it is correct to say that the chemical industry in large measure is fundamental to other industries, just as the science of chemistry together with physics and mathematics may be said to be sciences ministrant to other sciences. To a very real degree then your industry, whatever it is, depends for something upon the chemical industry, and in one way or another you are affected by what takes place through the application of chemistry to in-

This opportunity is a temptation to discuss the enviable record of the chemical industry these last several years and to present statistics to show something of the wages paid, the hours worked, the dividends declared, and the expansion undertaken, but I will content myself with emphasis of a single feature which is characteristic of the chemical industry. That is the policy of depending upon a small profit made on a large number of units rather than restricting production and hoping for a large profit on a smaller number of units. The industry prospers, by and large, by simplifying its processes, reducing its costs, increasing production, and widening markets, sharing savings with its customers whenever possible.

A single example will indicate this policy. Cellophane was introduced to the American market about 1923. You know how its use has grown and how it has become almost omnipresent. During that time there have been no less than eighteen voluntary price reductions made by its manufacturer, and some of these reductions have meant very substantial savings to its buyers and users. A reduction in price has meant a widening market, with increased production which in turn, plus continued research, has made for lower manufacturing costs. These once established have made possible another price reduction, and so the cycle has proceeded, though this time it has not been a vicious one. The result has been increasing good will for the manufacturer, increasing discouragement for competition.

The greatest advances in the chemical industry have been made on cheap and abundant raw materials. In the past these have been salt and coal tar. At the moment

it is petroleum. But the chemists are looking in other directions and have by no means reached the end of these possibilities. The improvements made in other industries also affect the chemical industry, which must then proceed to meet the demand. Similarly we not infrequently find examples of progress arrested until the chemical and its allied industries can produce something needed. Our best example of this is undoubtedly the great improvements made in alloys and corrosion-resistant metals, which in the last few years have made possible the construction of equipment without which some of our newest products could not have been manufactured.

But to mention some specific things which have happened lately of special interest to the other industries. From the standpoint of the purchasing agent, I would assume that the increase in choice made possible by the production of items capable of rendering the same or similar service should be mentioned first. The steady development in synthetic resins continues to produce new types with special

Address before the National Association of Purchasing Agents, May 23, 1938, at St Louis

characteristics both fitting them for individual uses and affording competition to other producers. The same thing has been true of wetting agents, so important in the textile industry, of detergents of the newer types, especially those for use with hard water, and of building board. The corrosion-resistant metals now appear in clad forms, so that the user may enjoy the permanence which they give to equipment at a much lower investment cost than was formerly required. In fact, in nearly every line of chemical manufacture there is now a greater choice as to what to use to perform a particular service than has heretofore been possible.

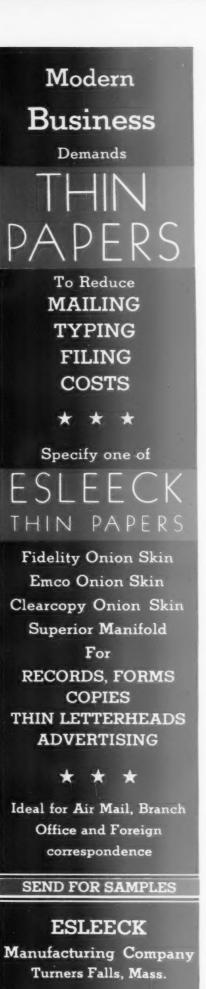
Of course, there has been a long list of new materials. Now that the petroleum industry has gone chemical, there are coming from it more and better solvents, improved lubricants, resins, synthetic rubberlike plastics, an important polymerization gasoline made from causing the polymerization of refinery gases to produce a motor fuel of high octane number. The control of surface tension has given new dispersing agents, so helpful in incorporating a powderlike colloidal carbon with a liquid to produce a black varnish or to reduce the glare of a concrete highway. Another application is in improved printing inks for textiles. New cellulose products are important, among them Cordura rayon which has already proved its value in the construction of heavy-duty tires because of its ability to resist to a remarkable degree the heat generated in long nonstop runs of busses and trucks. Its use in sail cloth has been spectacular. Fiberglas, a relative newcomer, is imposing in its physical and chemical characteristics, is making its way in conservative fashion, and promises much for the future.

Several products made from rubber hydrocarbons have found extensive use, an outstanding example being Pliofilm, seen on every hand from food savers in the refrigerator to rainproofs at the ball game. It is a good example of seeing in a new material an opportunity for a line of products not contemplated when the material was developed. Its companion Pliolite is finding employment as a waterproof coating on signs, paper, and similar base materials. A chemical process makes rayon-pile velvet noncrush and spot-resistant. The success of research in ceramics has produced Karcite, a material which can be molded into seamless sinks and table tops, to mention but two of its applications.

Natural monopolies continue to be broken through work in the chemical industries, thus making pressure upon purchasers impossible. Synthetic camphor made in America is now available in U.S.P. as well as in a technical grade. The synthetic rubberlike plastics such as Neoprene, Thiokol, Koroseal, and Vistanex are forging ahead because they are better than natural rubber for several purposes. The chemical fibers are gradually crowding the natural ones out of certain uses, the Cordura rayon above mentioned being a real threat to cotton for tire manufacture. One laboratory is conducting experiments so far most promising for the production of a synthetic fiber that will really surpass natural silk, even in such elusive properties as elasticity, elongation, and strength. Work on the metallurgy of tantalum when the only source was a single deposit in northwest Australia made the Fansteel Metallurgical Corp., ready to utilize different types of ore, if, as, and when discovered. The last year saw this information applied to deposits in South Dakota, much to our advantage.

We must also keep an eye on similar developments elsewhere. The vital importance of the chemical industry to the four-year plan in Germany cannot be overemphasized. Synthetic motor fuel from brown coal, synthetic wool from cellulose, Buna, the name given their form of synthetic rubberlike material, the extensive use of resins, the design of equipment to make unnecessary the use of metals not to be found in the Reich, soap from cracked paraffin—these are some of the possibilities.

Continued on page 70



BUSINESS and GOVERNMENT

Government's Program for **Rusiness**

WARREN BISHOP

Editor, Washington Newsletter for Manufacturers Washington, D. C.

IF I AM TO TALK about the Administration and business, perhaps we'd better reach an understanding as to who or what is the "Adminis-

In the period from '33 to '36, inclusive, we could have answered, "Why, the President and Congress." What Mr. Roosevelt asked for, he got. But Congress then was in a mood to go along with the President. Now it isn't. At the moment, the "Administration" is the President, and business is concerned chiefly with two questions-what does the President want to do; what can he do?

The answer to the first question is not hard to find. It lies in the President's speeches which he made in the Fall of 1932, when he built himself a platform and plan which still control his actions. Look at the little book built of those speeches called "Looking Forward," and you'll find discussed by Mr. Roosevelt, most of those things which we have talked about since:

Economic Planning Corporate Surpluses Their Danger

Government Reorganization

Land Utilization — submarginal lands

Old Age Pensions and Unemployment Relief

Unification of our Railroad System Control of Utility Holding Companies

The Yardstick for Utility Rates

Reciprocal Tariff Treaties The Annual Wage Farm Relief

I can't find that the President has ever given up any of his plans. He has failed in some, accomplished others, been obliged to put off others, but I doubt if he has ever torn up one plank of that platform.

Why, then, with an overwhelming majority in Congress, is there so much left to be done? Because he alienated Congress. Every secondterm President in our history, with hardly an exception, has had a balky Congress. The defeat of the Court Bill was the evidence of a revival in Congress of confidence in its own powers. Congress was all ready for the break. It had grown tired of being called a rubber stamp; it was ready to assert it-

There followed for the President a series of setbacks at the hands of Congress. He lost on his Reorganization Bill. So far, he hasn't had even the little left in the House Bill. His 7 little T.V.A. Bills have been whittled down to almost nothing and now lie dormant. He scored a little on the Tax Bill, for a shadow of the undistributed profits was left. If he gets any Wage-and-Hour Bill, which is close to his heart, it will be because the New England Republicans are more afraid of the South than they are of the President.

Early last year, the cry of "Dictator" was at its height. Hugh Johnson was beating a bass drum and crying "Dictator;" Dorothy Thompson drew a parallel with Europe and pointed out that we were on the road to dictatorship. So did dozens of others. And, just when the cry was loudest, Congress asserted itself and we were a Democracy again!

With that change in the Congressional mind, with it leaning toward the side of business, shouldn't business have been happier? It was, and it improved until last summer when it started sliding down hill and whether it has stopped, we don't yet know. What happened? We sum it up in one word and say, "Fear," but fear of what?

The tax situation and particularly the taxes on capital gains and on undistributed profits has been referred to as Business Enemy No. 1, but I insist that that title belongs to Labor. When I say that Labor (Union Labor) is Business Enemy No. 1, I have in mind two conditions one, the warfare between the two factions of organized workers: the other, the National Labor Relations

Address before the National Association of Purchasing Agents, May 23, 1938, at St. Louis.

Compulsory Wage Increases

The position of the employer these days seems to me not unlike that of a householder who, seated peacefully at home, is confronted by a visitor who wants to talk business. Being courteous, he offers the newcomer a drink and a cigar and they begin their discussion. Just as their business is about nearing settlement, there arrives another visitor who, without bothering about the host, tells the first visitor to "Get the Hell out of here." Visitor No. 1 declines, and lands one on the nose of visitor No. 2. In a minute, the visitors are in a rough-and-tumble fight; furniture is smashed, windows broken, everything wrecked.

Why doesn't the householder call the police? Because he has reason to believe that if he does, the policeman will arrest *him*.

No such analogy as I have drawn holds good all through, but what I have outlined is not an unfair picture. No sooner does an employer sit down to talk things over with the Federation Union than the C.I.O. descends on him. The Labor Relations Board is supposed to police this situation, but does the employer have a chance? I don't think so.

The Labor Relations Board starts—and I think this statement is not unjust—with the premise that its purpose is to encourage unionization; its preamble begins by speaking of "the denial by employers of the right of employees to organize and the refusal by employers to accept the procedure of collective bargaining." The act defines "unfair labor practice," but only the unfair labor practices of employers; nothing is said of unfair labor practices by employees.

In our history, we have had many instances of bad laws and rightly we denounce them. We have had many instances of judges carried away by prejudices, by excess of zeal for a cause, and rightly we challenge their place on the bench. But here we have a one-sided law administered by one-sided judges.

If I seem to speak strongly on this point, it is because I feel deeply that what may have been intended, by its framers, as a righteous effort to promote industrial peace, has succeeded only in fanning the flames of industrial war.

Numerous Board decisions have disclosed that employees belonging to unions may engage in lawless tactics with impunity and, if they fail in their objective, nevertheless may be returned to their jobs and given back pay by Board edict. While the Act has been officially described as a law without teeth, the financial penalties for violation are frequently most severe.

Is there a chance of bettering either the law or the enforcing agency? Not at this session surely, probably not at the next, unless in November we get a more decided shift in the complexion of Congress than now looks probable.

The other factor in the labor situation that disturbs and frightens the employers is the warfare between the C.I.O. and the Federation of Labor. Not only is the employer facing a problem of certainty of contract, but what of the constantly-recurring jurisdictional disputes-such cases as a Federation truckman refusing to haul a load of C.I.O. lumber? Does that encourage an employer to expand his business or to take on new liabilities? There was a time when business-or at least a part of it-thought that it served its purpose to have the ranks of union labor divided-they might be too busy fighting to devote time to harassing the employer. I don't think that feeling is widespread

But what's the hope of peace? Not much—at least, not in the near future. The fight between Lewis and his opponents is one of a deadly personal hatred. It is hard to think of Lewis and Green ever being on friendly terms.

Just now the union groups might be brought together if the Federation were willing. The fact is that the C.I.O. is having a hard time. Its great new industrial unions—steel, automobiles and rubber, are the centers of unemployment. Increasingly, membership is slipping and dues are disappearing. The big women's garment union, headed by David Dubinsky, has withdrawn. Howard, Secretary of the C.I.O. and once head of the Printers, has lost control of that union, and Lewis' coal miners are restive at continuing assessments to support the C.I.O. All in all, the outlook isn't happy for that tempestuous organization.

The Federation feels that time is serving its ends and that the day must come when C.I.O. will sue for peace. Meanwhile, so long as the A. F. of L. and the C.I.O. throw stones at each other, a goodly number of them are sure to hit the helpless employer.

What about Government wage-fixing? We shall get, I think, in some form or other before Congress adjourns, a Wage-and-Hour Bill. I believe a most distressing part of it all to be that the Bill is not being considered on its merits, on the question of whether it is wise or unwise for the Federal Government to undertake to establish some minimum of wages, some maximum of hours; it's being fought as a sectional fight, a new Civil War. If the South doesn't want it, then the North does.

It's interesting to speculate on what such a law might mean. If the law provided a 40¢ minimum wage and a 40-hour week (\$16 week) we should have to raise wages for about 1,500,000 men and women in this country. Even a 25¢-44 hour (\$11 week), would hit 900,000 workers. What the addition would mean in purchasing power even my most speculative friends among Government economists won't guess. So I'll rush in where the statistical angels fear to tread. Let's guess that \$2.50 a week would be added to 1,500,000 pay envelopes—that would be \$3,750,000-not added to the national income but shifted from one group to another. Statistics show that most of it would go for more and better food, and more and better clothing. It's quite possible that the farmer who has been an opponent of wage-and-hour bills might, in the end, benefit from it.

Don't forget that even if we don't get a Wage-Hour Bill, we Continued on page 62



Where Business and Government Meet

RAYMOND MOLEY

Editor, Newsweek New York

Some years ago, a national political leader, speaking to an audience of business men, said that while they were all possessed of property, many of them were political paupers.

I believe that phrase is not inapplicable now to a great number of Americans. They have quite understandably begun to wonder if they are, in fact, a part of the political system which prevails in their own country. They have come to doubt that the government of their own country is, in fact, a government of all the people. They have come to ask themselves whether they are not the disinherited-deprived of that equity and fairness which every citizen has a right to expect from his government. This state of mind, and the circumstances which have produced it, are ominous facts, but they are, nevertheless, facts-facts about which the American people should be deeply concerned. For whatever else may be said about the way of government or the way of life we have built up in the United States, this much, at least, is incontrovertible it never contemplated the transformation of representative government into the disorderly clash of

organized economic groups or the wielding of absolute political power by those whose rallying cry has been the sowing of a deep distrust of all but the smallest holders of private property.

The President can scarcely be controverted when he speaks of the necessity of raising the economic status of the submerged third of the population. Wholly aside from the question of humanitarianism, it is clear than an enlightened capitalism must accept the responsibility for the relative well-being of all economic groups. But the acceptance of that responsibility is in no way inconsistent with faithfulness to the best traditions of American political and economic life. Nothing could be further from the truth than the vague belief that we must destroy these traditions to fulfill our responsibility.

Six months ago, we were, regardless of our economic views or political preferences, encouraged to believe that the President had experienced a change of heart and was willing to give American business a chance to try its own program of recovery. Despite past doubts and despite past disappointments, we determined to take him at his word. But during the six months that followed, events succeeded each other which left only a better disillusionment.

These events are not the symptoms of a growing friendship for business. They are the symptoms of an implacable and unchangeable anti-business attitude.

Therefore candor compels me to say that I am not optimistic about a change of heart on the part of the Administration itself. There are still, of course, great numbers of admirable men in the Executive branch of the government who are willing to sit down with business and consider its problems reasonably and sympathetically. But so long as the dominant and official view of the Executive branch is the belief that the difficulties under which we labor are due to the actions of business and not, in part at least, to the mistakes of government; are due to deliberate villainy or greed or maliciousness and not, in great measure, to a universal ignorance of the endlessly complex interrelationships of our economic system; are moral problems and not problems of ultimately ascertainable fact-no amount of conferring at the White House or elsewhere can avail. The ramparts of suspicion will remain firm.

A year ago, the battle was won to preserve the courts of this nation from domination by an Executive intent upon the ruthless imposition of the rule of a temporary majority upon a temporary minority. There is evidence that it has not been permanently won-even for the duration of this generation. Yet it is won for the moment, and the time has come to turn to another sector, if the wisdom and the strength of representative government is to be vindicated. The time has come to work toward a representative assembly shaped in the tradition of parliamentary government in the past, a Congress composed of men responsible directly to the people and not to a party leader who arrogates to himself the right to interpret the will of the people to the representatives of the people.

Address before the National Association of Purchasing Agents, May 23, 1938, at

The 76th Congress may well be the most important in the history of the United States. Its major task is to vindicate the idea of a republic. Its secondary tasks are a number of measures of great importance. They center around a consideration and a reconsideration of specific measures that affect all aspects of the economic life of this country-relief, monetary policy, credit policy, labor, social security -and the formulation of a consistent policy to govern the relationship between private enterprise and public authority.

Representative government has always been a matter of faith-belief that its processes will place in power men relatively competent to perform the functions imposed on them. The recovery of our economic life depends upon this Congress. Let us place the stupendous interest of the national welfare above considerations of party, faction and personalities. Let us think of the national welfare firstof putting an end to economic drift. Let us elect a Congress with one simple mandate-Recovery. Let us elect a Recovery Congress.

To work for the election of good candidates is a job for all Americans who are concerned about the future of their country, and in particular, this year, it is a job in which business men must participate. The business man cannot delegate his political responsibilities. He must exercise them himself.

For a few months let us think solely of this particular election. For the moment forget 1940. What will happen then depends upon what happens in 1938. We cannot afford to wait. We must win this battle, now.

Specifically, what is there to be done this fall? Congressmen are going to be elected in 435 Congressional districts. In more than 30 states, Senators are to be elected. This means not one, but over 470 campaigns.

Regardless of party, every American business man, each in his own district and state, ought to concern himself seriously with the indi-

viduals who run for the House and the Senate. He ought to put to these individuals a rigorous test. If they are in public office, he should know what their record has been.

If candidates have not held public office, heretofore, what has been their record on public questions in the past? Are they in politics for what they can get out of it, or are they in politics for what they can put into it? Whether in office or not, the question should be asked, "What will you, as a member of Congress, do for recovery? Never mind about talk of ultimate objectives, about hollow words with hand on heart. Specifically, what are you going to do to make for business recovery, here and now?"

These are the tests of those who present themselves for public office. But there is another possibility. Business men in every district, in case the candidates who present themselves are inadequate, ought to get competent men to run.

Except in unusual instances,

avoid cooperative action limited specifically to business men. The case for business has been adequately stated by national organizations of business men. I doubt whether new organizations are desirable or necessary. Do not gang up in this campaign. Work as individuals, and where you can, work through parties. We do not want parties in this country based upon economic groups. We do not want a labor party; we do not want a farmers' party; we do not want an investors' or a business men's party. We want American parties.

Above all, use in politics the same incomparable skill that you have used in selling your own products. Business men have sold everything—from skyscrapers to rat-traps. They can, if they put their mind to it, sell good government too.

There is just one job ahead of us—Recovery. Just one political slogan worthy of notice—Recovery. One political faith—Recovery. Let us elect a Recovery Congress.

Recent Regulations on Purchasing

C. P. UPDEGRAFF

Editor, N. A. M. Law Digest, New York

The Federal Trade Commission Act for a long time has prohibited unfair methods of competition in commerce. The Wheeler-Lea Act prohibits "unfair or deceptive acts or practices." Heretofore the enforcement of the law has required affirmative proof that an actual unfair method of competition was being carried on to the injury of competitors. The Federal Trade Commission has objected that such proof is difficult and expensive, and that many practices which were un-

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fair and oppressive to the public generally were not prohibited because of the difficulty of proving either the existence of competition or injury to competitors. The Commission, therefore, urged the amendment of the law so that it now prohibits, as indicated, "unfair or deceptive acts or practices."

This amendment will enable the Commission to proceed against practices which it deems to be injurious to the public, whether or not they were unfair to competitors, and without the necessity of showing even the existence of competition. This Commission is thus armed with

Address before the National Association of Purchasing Agents, May 23, 1938, at St. Louis.

authority to crusade. It no longer needs to prove injurious effect upon competition or competitors. Upon its own conception of acts unfair or deceptive, it may undertake investigation and corrective decrees.

Another feature of the Wheeler-Lea Act prohibits "false advertisement." This section provides that in determining whether or not an advertisement is misleading, there shall be taken into account, among other things, any representations made or suggested by statement, word, design, device, sound, or any combination thereof, and also the extent to which the advertisement fails to reveal facts which are material in the light of any representations made, or which are material in view of the consequences which may result from the use of the commodity advertised under the conditions prescribed in the advertisement, or under customary or usual conditions.

The Act authorizes the Commission, when it has reason to believe that any person is violating Section 12 of the Act, or is about to disseminate any false advertisement, to bring suit in the appropriate United States Court to enjoin the same. Section 14 of the statute provides that, where the use of the commodity advertised may be injurious to health when used under the conditions described or suggested in the advertisement, the person found to have disseminated the false advertising may be found guilty of a misdemeanor and subjected to a fine of not more than \$5,000 or imprisonment for not more than six years, or both.

Considered from one approach, the Wheeler-Lea Act will furnish protection to purchasers. On the other hand, any purchasing manager who obtains an especially favorable price or service or other undertaking, must be wary lest he has become a party to "an unfair or deceptive act or practice." The purchaser as well as the seller is subject to the Act.

The Miller-Tydings Act is worthy of some attention. It was held, in United States vs. Colgate, 250 U. S.

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Government and Business Policies

HOWARD COONLEY

Chairman of the Board Walworth Company New York

THAT THIS GREAT country of ours THAT THIS GREAT COLORS is going through a period of fundamental changes, all thoughtful people will realize. Stand-patism is no longer possible. Only if we accept the inevitability of this fact can we qualify for leadership. And never was sane leadership more needed than now. But this does not release a single one of us from his personal responsibility—a responsibility for exerting his influence toward an orderly readjustment. For upon the soundness of design of the mold into which our molten metal of today is poured will the quality of our finished product of tomorrow be determined.

Specifically, what does this require from you and me? It calls for a re-examination of our economic thinking, a re-checking of our business practices. Only if we have cleaned our own house can we call upon others to do the same.

The report of the Committee on Industrial Practices, of the National Association of Manufacturers, establishes a code of ethics to which all enlightened leaders must subscribe. The report outlines the obligations of business management in its relationship to customers, suppliers, competitors, employees, stockholders, creditors, the local community and government. If these principles were subscribed to and conscientiously observed by business generally, there would be very little need for any of the controls and regulations now hampering business.

In a meeting of purchasing executives, the section dealing with sup-

Address before the National Association of Purchasing Agents' May 23, 1938, at St. Louis.

pliers should hold a particular interest. This section of the report is as follows:

SUPPLIERS

The manufacturer should treat his supplier as fairly as he himself wishes to be treated by his own customers, in the endeavor to maintain fair profits to the supplier as well as fair prices to the purchaser. This involves in respect to—

1. PRICES

- A. Refraining from attempts to purchase below reasonable prices by means of special concessions obtained by oppressive or unfair methods, or at prices below those available to other customers in comparable circumstances.
- B. Making orders or contracts (whether prepared by buyer or seller) clear, fair and concise, and not demanding technical information services, quality, prices, deliveries payment date or discounts which are not called for by the order or contract.
- C. Absolute observance of the rule that misstatements of prices and other conditions offered by one supplier shall not be made to another.

2. BRIBERY

 Absolute repudiation of all forms and manifestations of commercial bribery.

3. CLAIMS AND COMPLAINTS

- A. Provision for orderly adjustment of complaints.
- B. Reasonableness and fairness both in the making of claims and the adjustment of complaints.
- C. No utilization of claims and complaints for the purpose of securing improper allowances and rebates.

4. CREDIT INFORMATION

- Willingness to furnish full information requested as to the buyer's credit standing.
- 5. PURCHASING DEPARTMENT OBLIGATIONS
 - Full discharge of all commitments made.

- B. Discouraging solicitation or reception from the salesmen of suppliers of confidential information they have received concerning the operations of competitors.
- C. Giving assistance and suggestions for the improvement of products purchased, or for their manufacture at lower cost, or for additional uses to which they might be put.
- D. Reception of suppliers' salesmen promptly and their treatment fairly and courteously.
- E. Discouragement of either direct or indirect acceptance of excessive entertainment or gratuities of substantial value from salesmen; all sellers should be informed that this is the company policy.

6. GENERAL MANAGEMENT OB-LIGATIONS

- A. The policy of dealing with firms who observe and live up to good business ethics as applied to the manufacture and sale of their products.
- B. Requirement that the purchasing department and all other departments involved in the securing of materials be fully conversant with the general policies and aims of the management with respect to all aspects of the procurement of materials.
- C. The dispelling of the false belief that sharp practices and devious methods are essentials of success in the pur-

chase of materials, or in the long run profitable to their principals.

7. SUPPLIERS SUBJECT TO GOV-ERNMENTAL PRICE REGULATION

In addition to conforming to the above standards the manufacturer has the following special obligations in dealing with transportation agencies and public utility suppliers—

- A. Manufacturers should familiarize themselves with the nature and effects of existing and proposed public regulation upon such suppliers, and lend their influence to the formulation and implementing of sound policies in these fields which will meet present day conditions.
- B. Recognition should be given that the distinctive American principle of private enterprise is most in jeopardy in these fields; and that the far reaching consequences of government ownership and operation in the transportation and public utility industries would eventually affect all industries and all taxpayers.
- C. There should be realization that prices in the transportation and public utility fields are in fact removed by governmental control from the ordinary competitive price system.
- D. The policy of industries with respect to particular questions at issue in the field of transportation and public utilities which involves rates, fares, or charges should be personally considered and reviewed by the chief executives of industry.

If you agree with these state-

ments, it seems to me that they will bring to you a keen realization of a new significance to the position which each one of you holds, and a new recognition of your responsibility in justifying our American system of enterprise. In my opinion there is no branch of our business organization of today which more definitely reflects the policies and practices of corporations, large and small, than the purchasing department. In this respect its obligations are at least as great as those of the sales department and they reach a much more sensitive audience.

Many of the progressive companies have already recognized that their purchasing practices are a vital feature of their corporate policies, and thus have made the Supervisor of Purchases a high official of the company. How rapidly this custom will become universal will depend to a large extent on the seriousness with which you, who represent the purchasing function, undertake your part in strengthening our whole business structure, and how much dignity and respect you create for your position.

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Shell Petroleum Corporation's Wood River (Ill.) Refinery—one of the high spots of the plant visits program at the St. Louis convention

Taxes You Meet on Your Invoices

C. A. RENARD

Manager, Legal and Tax Department Ralston Purina Company, Inc. St. Louis

Taxes most frequently found on your invoices are:

- 1. Federal Excise Taxes
- 2. State Sales Taxes

A quick survey made by your national office indicated no difficulties with Federal Excise Taxes, with the exception of the Tax on lubricating oils as it applies to water soluble oils made into cutting emulsions. These emulsions generally consist of nine to thirteen parts of water to one part oil. There is a Bureau ruling to the effect that the oil in these emulsions performs both a cooling and a lubricating function and therefore, oil sold for this purpose must be taxed when sold since it is to be used to lubricate. Regulations 44, Article 40, allows the mixing of taxable oils since there is no increase in volume of the resulting lubricant, and the tax has been paid on the whole volume. But anyone who mixes taxable oils with other substances to produce lubricating oil is designated a manufacturer, and his product must carry the tax when sold or used to the extent that the tax has not been paid. Since the words "with other substances" seem all inclusive, Department field men in certain parts of the country are ruling that cutting emulsions are taxable on their entire volume (including nine to thirteen parts water) since they perform a lubricating function and consist of a taxable oil "mixed with other substances." Section 601 (c) (1) of the Revenue Act of 1932 imposes a tax of 4c per gallon on "lubricating oils." Article 40 of Regulations 44 in defining lubricating oil says, "The term lubricating oil as used in these regulations includes all oils, regardless of their origin . . . which are sold or used as lubricating oils." This article specifically excludes greases (360–390 penetration units). There are many oils not used for lubrication such as road oil, transformer oil, etc., and Article 43 explains that even though an oil is suitable for lubrication purposes, if sold or used for nonlubricating purposes it is nontaxable.

From the law and regulations it appears that a product to be taxable must (1) be an oil of such consistency that it is not classed as grease, and (2) it must be sold or used to lubricate. Water is not an oil and is not used to lubricate. Its use in cutting emulsions thins and in a sense partially destroys the lubricating oil. It is not intended that the tool slide over its work. Thus the person making a cutting emulsion is not "manufacturing a lubricating oil" but is in fact so thinning and destroying a lubricating oil that it will no longer present a protecting film between moving metals.

Under the Regulations lubricating oil sold to a manufacturer of lubricating oils is not taxable. The fact that the Bureau has ruled that oil sold for the purpose of making cutting emulsions must be considered lubricating oil and so taxed by the seller seems to classify the buyer as a user and not as a manufacturer of lubricating oils. If the emulsion maker is not a manufacturer of lubricating oils he has no further tax to pay.

Up to the present time Washington has not ruled on this matter, but counsel for several of the large oil companies, whose opinions have



been asked, give it as their opinion that the water content of cutting emulsions cannot be taxed. The Bureau has ruled that lubricating oils added to gasoline in small quantities (1% or less) for top cylinder lubrication are nontaxable as lubricating oils, but taxable as gasoline. One oil company obtained an unofficial ruling to the effect that kerosene sold to be blended with lubricating oil to make a cutting oil would not be taxable. All of which indicates that when the Bureau finally makes a ruling it will be to the effect that only the lubricating oil portion of cutting emulsions is taxable.

There are now twenty states with sales tax laws and three cities, New York, New Orleans, and Philadelphia, have similar laws. In general, these taxes are on retail sales or the final sale to the ultimate user of tangible personal property and is effective when title passes. No two of these laws are exactly alike as to items taxed and items exempted, and for this reason any attempt to graphically compare them meets with difficulties and its results must only be taken as indica-

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Address before the National Association of Purchasing Agents, May 24, 1938, at St. Louis.

Business Conditions and Outlook

FREDERICK J. HEASLIP

N.A.P.A. Business Survey Committee

THE INTENSITY OF the present depression within the business structure of the country has now become fully recognized on all sides, but the astonishment at the suddenness of its arrival has some time since disappeared. Meanwhile, the time of freedom from the industrial quagmire is impossible of prediction at this juncture, particularly in view of the difficulty in expecting much of an uplift nature during the June-August period. Few indeed are the features at this time visible that would give reliable indications of the turn of the tide during the next several months.

Nevertheless, the abject fear that has been so prevalent within the multitude in similar times of the past is not evident at this time, and the consensus appears to be that greater depths are less probable than a turn for the better. Obviously, the increase in unemployed people, and the accompanying additions to relief expenditures, are the cause of no little concern. However, the time element is a most important factor, as curtailed production and the working down of industrial inventories are bound to act as a stabilizer and bottom finder sooner or later.

All lines of trade are having the same difficulties and unless improvement occurs within commercial circles rather soon, values of numerous manufacturing materials will be forced further downward.

Much stress is being laid on the possibilities of inflated commodity values and security prices as a result of the spending activities of administrative bodies, but the results of these projects are rather slow in taking effect, and while these policies have been impressive in the more recent past, there is considerable apprehension concerning the possibilities in this instance. It seems reasonable to suppose, however, that should there be brought about a condition showing less animosity within governmental-labor and industrial-financial circles, some of the obstacles would be removed from the road to recovery.

The trend of commodity prices gradually loses ground under prevailing circumstances and while certain items have been marked down considerably, on the whole, values have been well maintained in view of the reduced rate of turnover in the major lines of trade. An improvement in the supply-demand relation of basic commodities is essential to any upward movement in price trend.

In the meantime, manufacturing schedules do not warrant extensive commitments at this time and any purchases ahead would be on an investment basis. This policy is not advisable. It is true that some items have been reduced to points that ordinarily would present good buying zones, and there is no assurance that values generally are not at or near the low point of the current market movement. Nevertheless, until there is more convincing signs of business recovery, most conservative buying policy is still advocated.

HERBERT N. McGILL

McGill Commodity Service, Inc.

THE PRICE INDEX of raw and semi-finished commodities increased at an unhealthy pace during late 1936 and early 1937. Meanwhile, prices of finished goods climbed in a much more moderate manner. The collapse in prices over a period of the past year has been concentrated chiefly on the raw material group, and today the current relationship of raw and semi-finished industrial prices to that of finished goods is almost exactly the same as that which existed at the beginning of 1934. This is a highly necessary development as it lays the foundation for a later widening in profit margins and a restoration of more normal business conditions. In other words, the spread between raw materials and finished goods was critically unbalanced a year ago. Today a normal balance exists.

In summing up the statistical status of basic inventories and commodities, it is important to differentiate between capital goods and the consumer goods industries. Heavy industries such as iron, steel, building, and automobiles, which have proved to be the backbone of broad expansion periods, are not in a position to lead the way out of this current depression.

It is my belief that the first signs of basic improvement will be witnessed in the consumer goods industries. Not only have production schedules rapidly dwindled to a level fairly close to subnormal consumption, but prices have tumbled at a rapid pace and have reached a low that is indicative of a well maintained per capita consumption despite widespread unemployment and impaired purchasing power. Stocks of finished goods in wholesalers' and retailers' hands have steadily diminished as forward buying has been out of the picture for nearly a year. The time is not far distant when considerable compulsory buying will be in evidence.

I am fully cognizant of the economic background which suggests that the period of low prices will be temporarily prolonged. Consequently, in the majority of cases there is no immediate buying incentive. However, commodity markets must be watched with greater care from now on for three reasons: (1) the bulk of the decline is over, (2) the next important major movement is destined to be upward, and (3) as commodity prices were extremely sensitive to economic adversity, likewise, prices will be quick to discount signs of economic betterment as well as the prospective renewal of inflationary measures.

A year ago we were all fearing inflation. Today complete deflation exists. At present throughout the country there is great fear of a prolonged depression and further deflation. There is no point in being wrong twice on the same problem. The next major movement in business activity, the stock market, employment, purchasing power, and commodity prices is upward. The next major move in inventories is downward. The real danger from now on will be in overstaying the short side of commodity markets.

Progress in Coal Selection

THERE ARE ABOUT 100,000 coal burning industrial plants in the United States, no two of which are surrounded by identically the same set of combustion and operating conditions, even though their design may be identical. There are usually to be found one or more defects in most steam generating units which have a restricting effect upon coal selection. This is often due to poor coordination of the component parts—boiler, furnace, stoker or pulverizer, as a result of intensive competitive bidding at the time this equipment is purchased.

There are over 6,000 coal mines in the United States, and these areoperating in morethan 200 seams. Whereas in general, coal does not vary widely in the same seam in situ, it may be altered more or less by differences in preparation methods and practices. These 6,000 mines each make from one to thirty different sizes of coal, the average being about eight. From a combustion performance standpoint, coal size bears a different relationship among many seams.

Coal prices include many variations which bear on economy.

From the foregoing, it is plainly evident that there are literally thousands of variables involved in plants and coals.

To coal producers a panoramic view of consumers' plants would resemble a crazy quilt and to coal consumers a panoramic view of producers' mines and seams would likewise appear to be patternless. This would seem to be a very confused situation; however, we can be consoled by the fact that the most complicated jigsaw puzzle becomes perfectly simple after it has been assembled. After all, there is a proper place for practically every type of coal and the problem resolves itself into finding that place for that coal; in other words, finding the respective holes for round and square pegs.

We know it is true in coal selection, that after employing the chemical and physical analyses to full advantage the final test of a coal lies in its actual burning in a specific plant's equipment. There is need for full scale plant tests under the exact conditions of use before a final decision is made.

Using machine shop parlance, the author looks upon the coal selection charts as the instruments for taking the "rough cut" and the actual burning test as the instrument for making the "finish cut." In other words, the coal selection charts will serve to do the big job of eliminating a large number of coals not suitable for a particular plant, and the burning tests make the final elimination and determine which of the remaining coals should be selected.

It is a hard job to match coals and plant equipment;

J. E. TOREY

Manager, Fuel Engineering Division Appalachian Coals, Inc. Cincinnati

so, when a plant finds a coal which is suitable to its peculiar requirements it has gone a long way on the road of coal selection and should cling to that coal for a reasonable length of time. At least, until such time as the overall economics involved, or other conditions, indicate than an attempt should be made to secure another source.

It takes months for operating crews to become thoroughly familiar with, and to secure optimum results from, a given coal and where the same coal is burned year in and year out the plant records often show a slight but consistent improvement in results in each successive year.

This leads us to the consideration of one of the greatest evils inherent in coal ultilization today—that is, coal turnover. An investigation by any one will reveal that this turnover is going on at an appallingly fast rate. Some plants use dozens of different coals annually.

In investigating customer turnover, it is revealed that many good reliable producing companies have a customer turnover ranging from 50 to 70% annually. The sales cost of finding from 50 to 70% new customers each year is tremendous, but this does not represent the total cost. Whereas, the sales cost figure is high, costs incidental to coal turnover in plants costs the consumer even more. This latter cost is reflected in many ways such as, high maintenance, low evaporation and efficiency, and higher labor costs, all occasioned by the use of ill adapted coals, or too frequent changes in coal sources.

Another important factor which causes endless trouble is the indiscriminate mixing of coals of different types and burning characteristics, and here again are felt the bad effects of a high turnover rate in that it contributes largely to the mixing of coals. In practically all existing coal firing equipment, coals produce the best results when burned straight, or independently of each other. In the largest power plants it is, of course, often impractical, if not impossible, to keep coals segregated; however, in most plants this can be done if the management so desires, and even in the largest plants some progress can be made in this direction.

A supervising engineer for a large industrial concern, operating many different plants, told the writer that at one of their plants they had stored in one pile approximately 20,000 tons of coal, representing widely dif-Continued on page 53

Address before the National Association of Purchasing Agents, May 24, 1938, at St. Louis.

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Among the Associations

Montreal—The following officers have been elected for 1938-1939 by the Montreal Association: President, E. J. Trott of International Paints (Canada) Ltd.; Vice President, W. O. Graburn of Ottawa Car Mfg. Co., Ltd.; Secretary, W. B. Osler of Harrison Bros., Ltd.; Treasurer, J. Bruce Jordon of National Drug & Chemical Co., Ltd.; National Director, Edmond Garneau of National Harbors Board; Canadian Council Member, H. D. Caplan of Building Products, Ltd.; Executive Committee, J. S. Hayes of Shipping Containers, Ltd., W. M. Hall of Power Corp. of Canada, Ltd., K. V. Coombes of Canadian Copper Refineries, and H. F. Van Dusen of Canada Foundries & Forgings, Ltd.

Ann Arbor—Officers for 1938-1939 have been elected by the Educational Buyers Association, as follows: President, J. E. Millizen, University of Illinois, Chicago Professional Colleges; Vice President (Program), George S. Frank, Cornell University; Vice President (Public Relations and Promotion), O. B. Sawyer, Duke University; Vice President (Regional Organization), P. R. Trautman, Baldwin-Wallace College; Secretary, Walter B. Bulbick, University of Michigan; Treasurer, T. M. Johnson, New York University.

Chattanooga—J. Frank Kelley of the Tennessee Electric Power Co. has been elected president of the Chattanooga Association for the coming year. Other officers are: Vice President, J. M. Gamble; Secretary, J. W. Alexander; Treasurer, J. C. Pars; National Director, O. A. Schier.

Toledo—The following officers for 1938–1939 have been elected by the Toledo Association: President, Bert Pim of Vrooman Fehn Associates; Vice-Presidents, John Frautschi of Bunting Brass & Bronze Co., and Allen D. Campbell of Owens Illinois Glass Co.; Secretary-Treasurer, George L. Kibler of A. Bentley & Sons Co., Directors, W. D. Bolin of the France Stone Co., J. H. Jeffrey of Plaskon, Inc., L. D. Mawhorter of Toledo Edison Co., R. J. Scheidinger of Consolidated Paper Co., W. J. Todd of City Auto Stamping Co., and Gordon Yost of the Toledo Scale Co.

MAY 5

Oakland—Spring open golf tournament and dinner of the Northern California Association, at the Sequoyah Country Club.

Springfield, Mass.—Dinner meeting of the Western Massachusetts Association, at the Hotel Bridgeway. Speaker: Robert V. O'Brien, "Transportation." The following officers have been elected for the coming year: President, Frank E. Phillips of Chapman Valve Mfg. Co.; Vice President, William M. Case; Secretary, D. E. Warner; Treasurer, S. J. Kennedy; Executive Committee, E. J. Fleming, Jr., C. D. Jersey, and Robert Price; National Director, J. F. Drennan.

Birmingham—Luncheon meeting and plant inspection trip of the **Birmingham Association**, at the Sixth Avenue plant of the Southern Bell Telephone & Telegraph Co.

MAY 6

Salt Lake City—Annual meeting of the Utah Association, at the University Club. The following officers were elected for 1938–1939: President, Richard A. Reid; Vice President, W. L. Park; Secretary, S. W. Mote; Treasurer, K. H. Searle; National Director, L. V. Guild.

Houston—Joint meeting of the Houston Association, with the Salesmanship Club. Speaker: J. H. Rose of The Reliance Life

Insurance Co., "Relations Between Salesman and Purchasing Agents."

MAY 7

Bridgeport—Fifth annual dinner dance of the Salesmen and Purchasing Agents Association, at the Stratfield Hotel.

MAY 9

New Orleans—Dinner meeting of the New Orleans Association, at Kolb's Restaurant. Speaker: Leo L. Hirsch, Chairman of the Trade Relations Committee, Association of Commerce, "Trade Relations in the New Orleans Business Area."

Wyomissing—Dinner meeting of the Reading Association, at the Iris Club. Motion pictures showing the various stages of spring manufacture were shown through courtesy of the Wallace Barnes Company. The following officers were elected for 1938–1939: President, Donald Eaches; Vice President, A. M. Johnston; Secretary, H. H. Hollenbach; Treasurer, C. H. Yoder; National Director, C. E. Thompson.

Boston—Annual meeting of the New England Association, at Schrafft's. Speaker: Gerrit Fort, President of the Mystic Terminal and Executive Assistant, Boston & Maine R. R., "The Port of Boston." Officers were elected as announced in this column last month. The meeting was preceded by an afternoon conference on "Purchasing for Employees," led by W. S. Randall

Columbus—Annual meeting of the Columbus Association. The following officers were elected for the coming year: President, William R. Horne of White Castle System; Vice President, Fred W. Kirby of National Electric Coil Co.; Secretary, L. H. Hersee of Union Fork & Hoe Co.; Treasurer, Ray M. DeWolf of Hughes-Peters Electric Co.; National Director, J. A. Carroll of Goldberg Iron & Steel Co.; Directors, M. C. Barr of Columbus Malleable Iron Co. and A. B. Weinfeld of Electric Power & Equipment Co.

Portland—Annual meeting of the Oregon Association. The following officers were elected for the coming year: President, Ross B. Cooper of Multnomah County; Vice President, Fred Nowotny of Ballou & Wright; Secretary, Matt Pouttu of Pure Iron & Culvert Co.; Treasurer, Orville K. Buckner of Electric Steel Foundry; National Director, Lee A. Baumhover of City of Portland; Executive Committee, Harold Cake of J. E. Haseltine Co., Gordon Lindsey of Shell Oil Co., and George Williams of Wiggins Co., Inc.

MAY 10

Springfield, Ohio—Dinner meeting of the Springfield Association, at the Heaume Hotel. The following officers were elected for 1938-1939: President, J. H. Horner; Vice President, M. C. Marsh; Secretary, Frank S. Brady; Treasurer, John Henry; National Director, Arthur L. Stoll; Local Director, E. J. Saum.

Tulsa—Dinner meeting of the Tulsa Association. Speaker: J. L. Burke, Traffic Manager for the Stanolind Pipe Line Co., "Relations Between Traffic and Purchasing Departments."

Indianapolis—Luncheon meeting of the Indianapolis Association, at the Athenaeum. Demonstration of liquid oxygen, by R. D. Myers of the Indiana Oxygen Co.

Omaha—Annual meeting of the Greater Omaha Association of Purchasing Agents. The following officers were elected for the coming year: *President*, Harry I. Archibald of the C. G. Johnson

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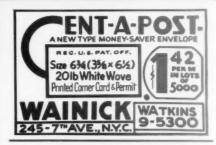
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Boiler Co.; Vice President, R. S. Gill of the National Baking Co.; Secretary-Treasurer, T. D. Price of Fairmont Creamery Co.; Director, C. G. Larsen of the Crane Co.

New York—Dinner meeting of the Metropolitan Purchasers' Assistants Club, at the Hotel Brittany. Speakers: Russell Varney, Bakery Merchandising Manager of Standard Brands, Inc., "Who Counts?;" and Maj. A. B. Proctor, U. S. Army Quartermaster Dept., "The Industrial Mobilization Plan."

Vancouver—Annual meeting of the British Columbia Association, at the Vancouver Hotel. This was a joint meeting with the Canadian Traffic League. Speakers: Laurie Williams of Adanac Freight Brokers, "Handling of Pool Cars and Their Advantages to the Purchasing Department;" Frank Barbour of Home Oil Distributors, Inc., "Trials of a Purchasing Agent and his Relation to the Traffic Department." The following officers were elected for the coming year: President, A. W. Ker of Gordon & Belyea, Ltd.; Vice President, A. E. Baker of B. C. Pulp & Paper Co., Ltd.; Secretary, W. Leatham of Imperial Oil, Ltd.; Treasurer, R. C. Girling of Canadian Canners Western, Ltd.; National Director, E. B. Barteau of White Pass & Yukon Route.

MAY 12

Philadelphia—Dinner meeting of the Philadelphia Association, at the Bellevue-Stratford Hotel. Speaker: Dr. Allen A. Stockdale, "The American Business Man." The meeting was preceded by an afternoon forum on the topic, "Reception of and Relations with Vendors and their Salesmen."

Chicago—"Frederick J. Heaslip Night" dinner meeting of the Chicago Association, at the Hotel Sherman, in honor of Mr. Heaslip, who has retired from the position of secretary of the Association and editor of the Chicago Purchaser after ten years of service. The program was chiefly devoted to brief statements of tribute by officers of the Association who have served with Mr. Heaslip during his long and useful service.

Seattle—Annual meeting of the Washington Association, at the Olympic Hotel. Speaker: Prof. Joseph Demmery of the University of Washington, "Current Economic Problems as They Affect the Purchasing Agent." A motion picture, "The Silver Horde," depicting the Alaskan salmon fishing and canning industry, was shown by courtesy of the American Can Co. Officers as announced in this column last month were installed.

Birmingham—Luncheon meeting of the Birmingham Association. A discussion of efficient forms for purchasing department use was led by George Cole of Alabama Power Co., Jack Belcher of Birmingham Electric Co., and H. C. Green of Republic Steel Corp.

Los Angeles—Annual meeting of the Los Angeles Association, at the Elks Club. The "Purchasing Clinic" was devoted to a discussion of "Purchasing Transactions" led by E. H. Weaver of Union Oil Company and "Personal Purchases" led by J. L. Gray of Southern California Edison Co. The following officers were elected for 1938–1939: President, Robert L. Grube of Stephens-Adamson Mfg. Co.; Vice Presidents, J. A. Tongue of Western



Dairy Products and A. J. Smith of Fibreboard Products, Inc.; *National Director*, Mel C. Barker of Featherstone's, Inc.; *Secretary*, Deal L. Fisk of University of Southern California.

San Francisco—Twentieth annual joint meeting of the Northern California Association with the San Francisco Sales Managers' Association, at Treasure Island in San Francisco Bay. The afternoon was spent in an inspection of the Fair Grounds, followed by a dinner meeting in the Administration Building. Speakers: Leland W. Cutler, President of the Golden Gate International Exposition, and Warren H. McBryde.

MAY 17

New York—Dinner meeting of the New York Association, at the Builders' Exchange Club. Speaker: F. W. Lovejoy of the Socony-Vacuum Oil Co., "Selling in Times Like These." The following officers have been nominated for 1938–1939: President, Harold K. LaRowe of Dairymen's League Cooperative Assn.; Vice Presidents, J. Raymond Boyle of The Prudential Insurance Co., and Thomas I. Savage of Murphy Varnish Co., Treasurer, E. B. Fielis of New York & Queens Electric Light & Power Co.; Executive Committee, Walter E. Cummin of White Laboratories, Edward A. Bantel of National Bureau of Casualty & Surety Underwriters, and John D. Leeson of Radiotron Division, R.C.A. Mfg. Co. The meeting was preceded by an afternoon forum on "Wholesale and Discount Purchasing Privileges Available to Employees," under the leadership of W. E. Cummin.

St. Louis—Dinner meeting of the St. Louis Association, at the Coronado Hotel. This was a preview or "Dress Rehearsal" meeting in preparation for the national convention.

Pittsburgh—Dinner meeting of the Pittsburgh Association, at the William Penn Hotel. Speaker: Prof. James B. Blackburn of the Law School, University of Pittsburgh, "Contractual Law." The following officers have been elected for 1938–1939: President, J. M. Knowles of Consolidation Coal Co.; Vice President, W. E. Bittner of Diamond Alkali Co.; Secretary, C. H. Rindfuss of Pittsburgh Screw & Bolt Corp.; Treasurer, E. C. Buerkle of National Bearing Metals Corp.; National Director, J. H. James of Pittsburgh & Lake Erie R. R.: Directors, Walter Nuttall of Blaw-Knox Co., J. H. Phillips of Pittsburgh Steel Co., P. B. Zoeller of A. M. Byers Co., A. Davia of Dravo Corp., and Howard Livezy of Railway and Industrial Engineering Corp.

Oakland—Luncheon meeting of the East Bay Group, Northern California Association, at the Lake Merritt Hotel. Speaker: Gerald B. Wallace of the San Francisco School of Business, "Safety First with Firearms."

Clarksville, Ind.—Meeting of the Louisville Association at the plant of Colgate-Palmolive-Peet Co. The following officers were elected for 1938–1939: President, L. A. Anderson, City of Louisville; Vice Presidents, G. W. Leep and L. Greenebaum; Secretary, L. G. O'Connor; Assistant Secretary, Fred Pfeiffer, Jr.; Treasurer, J. T. Kinberger; Directors, William Kerrick, T. A. Corcoran, and Malcolm Mason.

MAY 19

San Francisco—Luncheon meeting of the Northern California Association, at the Palace Hotel. Sound film, "Heat," presented by the Johns-Manville Corp.

Canton—Executive Night meeting of the Canton & Eastern Ohio Association, at the Canton Club. Speaker: J. E. Dickinson, United Engineering & Foundry Co., Pittsburgh, "Patents."

Troy—Inspection visit of the Eastern New York Association, at the Watervliet Arsenal, followed by dinner meeting at the Hendrick Hudson Hotel. Installation of new officers.

MAY 20

Tulsa—Tour of the exposition grounds and exhibits by the members of the Tulsa Association, and dinner meeting in the roof garden of the Tulsa Club, in observance of "Purchasing Agents" Day" at the International Petroleum Exposition.

MAY 23

Bethlehem—Annual meeting of the Lehigh Valley Association, at Harker's Hollow Country Club. Motion pictures, "Design for Power," illustrating recent developments in the testing of gasoline, and "A Trip Through Africa." The following officers were elected for the coming year: President, G. M. Overfield of Bethlehem Fabricators, Inc.; Vice President, I. L. Rush of Victor Balata Textile Belting Co.; Secretary, R. E. P. Yoder of W. H. Taylor & Co.; Treasurer, E. H. Wieder of C. Y. Schelly & Bros.; National Director, H. R. Chidsey of Warren Foundry & Pipe Co.

MAY 24

Oakland—Luncheon meeting of the East Bay Group, Northern California Association, at the Lake Merritt Hotel. Sound film, "Sponges and Steel Wool" presented by the J. H. Rhodes Co.

Indianapolis—Luncheon meeting of the Indianapolis Association, at the Athenaeum. The following officers were re-elected for another term, to be installed at the annual picnic of the Association at the Hillcrest Country Club, June 9th: President, Frank C. Thompson of Link-Belt Co.; Vice President, George C. Mercer of P. R. Mallory Co.; Secretary, John T. Casebourne of Esterline-Angus Co.; Treasurer, Louis Moller of Carter-Lee Lumber Co.

MAY 26

San Francisco—Luncheon meeting of the Northern California Association, at the Palace Hotel. Speaker: Paul C. Smith, of the San Francisco *Chronicle*, "Europe Recently."

Seattle-Plant visit of the Washington Association, at the American Can Co.

MAY 31

Oakland—Luncheon meeting of the East Bay Group, Northern California Association, at the Lake Merritt Hotel. Educational film, "How to Get a Job," presented by Spencer Benbow, Coordinator of Placement, Oakland Public Schools.

Bristol, Conn.—Golf and dinner meeting of the Connecticut Association, at the Chippanee Country Club. Speaker: George H. E. Smith of Yale University, "The Labor Situation in America."

Progress in Coal Selection

(Continued from page 48)

ferent types of coal from four different coal fields, and that they were experiencing serious combustion difficulties as a result of the indiscriminate mixing. He said they had learned their lesson and would never again store coals in this fashion. This same executive, in continuing the discussion of coal selection stated, "altogether too much attention is paid to the price per ton of coal, and that there are many factors of just as great importance which should be considered." He also advised that he was using a rather simple scheme to keep the buyers for their various plants informed as to the results being obtained monthly as a result of their coal purchases. On a single sheet he prepares a three-way cost breakdown for all the plants owned by his corporation.

The first breakdown is a comparison of the delivered cost on a per ton basis; the second breakdown shows the cost per million B.t.u.; and the third breakdown the fuel cost per thousand pounds of steam generated.

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He uses a series of colored rings to indicate the best, medium and poorest values in each breakdown.

A director of purchases for a large corporation made the statement not long ago that for years he had felt their power plant engineers were always trying to get "ahold of the long end of the stick" and to influence them into purchasing premium coals when these were unnecessary. However, as he became better posted on combustion conditions existing in their plant he became convinced he was wrong and that the fuel burning equipment (both stokers and pulverizers) was as "fussy as old maids" and had to be furnished the proper coal diet in order to function satisfactorily. He further stated, "What is meat for one plant is poison for another in the matter of fuel requirements."

A summary of a recent survey of industrial power plants conducted by Bituminous Coal Research, Incorporated, in which unbiased research engineers investigated a representative number of plants, revealed these findings: (1) Consumers do not have accurate knowledge of coal seams and their burning characteristics; (2) Salesmen do not understand customer's specific fuel requirements; (3) Lack of cooperation between buyer and his operating engineer; (4) Lack of knowledge mistaken by both buyer and seller for a breach of honesty; (5) Price rather than suitability dominates coal negotiations; (6) Average firing equipment has serious shortcomings which affect its performance and limit the coal selectivity range; (7) Clinker trouble almost universal; (8) Coal substitution quite prevalent, particularly by jobbers; (9) Present knowledge relating to coal selection and combustion being poorly applied; (10) Size-consists of coal, as delivered, varies widely; (11) Buyers have a fixed opinion that fine coal is synonymous with dirty coal; (12) Coalhandling equipment produces detrimental segregation in many power plants; (13) Coal mixing quite prevalent and detrimental; (14) Inadequate fuel engineering service; and (15) Tremendous turnover in coals.

A discussion of coal selection would not be complete without some reference to "coal specifications." Many consumers have had serious troubles with specifications and so, too, have coal producers. Buyers often find that the tighter they draw the specifications the more these fail to accomplish the desired end. In fact, many times the specifications seem to "go into reverse" and produce results just the opposite of those anticipated. This might occur, for instance, if the specifications were too stringent as far as analysis is concerned, but wherein penalties are provided for marginal coals. In this case the marginal coals, many of which are undesirable, would be furnished and the penalties taken to the exclusion of the desired coals.

Specifications are always based on certain chemical and physical properties of coal. Now, if, when considering all the known factors which include many more than the chemical and physical properties usually mentioned in specifications we are unable to tell definitely

how satisfactory a coal will be and a full scale plant test is necessary before a proper and final decision can be made, it is obvious that specifications are not fully adequate and that no amount of "tightening" will make them so. In other words, specifications will take the "rough cut" and serve well as a stablizing force. Specifications are necessary as a base on which negotiations may be started and carried on, but they should always be complemented with provisions which will permit the final selection of satisfactory coals. What a coal will do is more important than what it appears to be.

Metallurgical Research

(Continued from page 35)

yet to be developed will come to wide utilization arising as a result of demand on the part of electrical, mechanical, chemical and civil engineers. But senseless multiplication is a costly and highly undesirable trend.

We are coming to understand the mechanism of corrosion and, in some directions, are really taking fundamental steps to combat it. Aluminum has brought us an important means of fighting corrosion. Stainless steel is already of incalculable industrial value. A recent development of apparent promise is the dipped coating of aluminum on steel.

At the beginning of the present century, American metallurgy made one of its greatest contributions to all forms of engineering in the announcement of highspeed steel. American industry, which is today based largely upon quantity production, would come almost to a halt within a few days if high speed tool materials were to be withheld. Now there is a new group of tool materials available which may become almost equally important to commerce. The sintered carbides, as they are called, are only slightly less hard than the diamond and when intelligently used, permit machining operations otherwise impossible. It is scarcely to be expected that the sintered carbides will produce results as revolutionary as did high speed steels, although their importance is indicated by the fact that purchasing agents have been paying hundreds of dollars a pound for them.

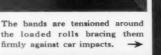
A new technique in production of metals called powder metallurgy has already established itself. Until the advent of powder metallurgy, practically all metals and alloys were produced in the liquid condition and subsequently solidified and worked into useful forms. But there are many metals which, when liquefied, do not mix. When cast, such combinations of metals would not generally produce useful materials. In powder metallurgy, however, the metals are pulverized to an extremely fine dust which is then, by heat and pressure, formed in molds giving extremely useful products. The layman would be inclined to question the strength of steel or brass made from pressed powder, but his doubts would be completely without foundation. Alloys so produced may have properties fully equivalent to the same alloys made by more conventional processes.

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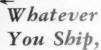


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NEAL GROSHEIDER has been appointed chief purchasing agent for the Southern Pacific Railroad at El Paso, Texas, succeeding J. A. Bradshaw, who is retiring from active service after 48 years in railroad work, 32 of which were spent in the purchasing department.

GEORGE E. POTTS, formerly assistant purchasing agent for the University of Michigan, has been appointed purchasing agent for Iowa State College, succeeding G. P. BOWDISH, who will retire September 1st after 23 years in that position, to engage in farming at Waubeek, Iowa.

H. V. Chisholm has been appointed purchasing agent for the Walworth Co., Boston, succeeding J. F. Dorney, who has been promoted to the position of Works Manager for that company.

The Present Status of Reciprocity

(Continued from page 33)

prices were "somewhat higher than competitors"." About two-thirds of those who approved of its use under competitive conditions specifically indicated that they approved of its use as a means of obtaining "an interview for salesmen when an interview would not otherwise be granted."

In seeking to gain an adequate conception of the general reciprocity situation, one must not be led astray into thinking of it solely as a practice in which but a single seller and a single buyer are involved. In the past, most of the discussions as to the wisdom of the policy have apparently assumed, not merely that such simple relationships are typical, but that they constitute the only circumstances under which the issue arises. Such is, in fact, far from true, for about 44% of the purchasing officers' replies indicated that their companies engaged to a greater or less extent in what may be called three-way reciprocity, or even more complicated forms. Thus a manufacturer of sheet metal sells his product to a manufacturer of oil drums.

The sheet metal manufacturer, having no use for the drums, buys its oil from a customer of the drum manufacturer. A great deal of ingenuity has been exercised in the use of reciprocity when the manufacturing requirements of the seller are such as to preclude the purchase of the products sold by an actual or a potential customer.

Even the purchasing department may take the initiative in the development of reciprocal relations by using its contacts with a view to their sales possibilities. In fact there are many cases when the purchasing officer goes out of his way to assist customers from which he is not in a position to buy by suggesting other companies, obligated to his own, to which his customers may go.

An entirely new consideration is injected into the situation when a purchasing officer recommends that one of his sources of supply buy from one of his customers, for he thereby assumes a real responsibility for the satisfactoriness of the customer's product, and may have little or no knowledge of the purposes for or conditions under which the supplier intends to use the product.

Thus one purchasing officer states:

"A company to which we have sold machines endeavored to use us as a means for securing orders for their pig iron. We do not operate a foundry, so we were asked to write our various foundry connections insisting that they use this particular customer's pig iron in the manufacture of our castings. This you can readily see would be very dangerous for us, the reason being that, if our foundry connection followed our request by purchasing this particular company's pig iron and the castings made from it were not suitable for our needs, the foundry immediately would find fault with the iron we recommended and place the whole responsibility on us."

Taxes You Meet on Your Invoices

(Continued from page 46)

tive and the laws and regulations must be referred to for exact information. In the case of the City Sales Taxes it may even be necessary to go back to the enabling act passed by the legislature to be sure the law and regulations lie within the bounds prescribed.

SAFETY...



• Industry recognizes its annual expenditure for the safety of workers as an extremely profitable investment. To maintain its standards, every safety device and material must be checked and double-checked. Only the most dependable may be used. This explains why Industry prefers Plymouth Ship Brand Manila Rope for the innumerable jobs in which the safety of life and property must be entrusted to Manila Rope. Plymouth Rope offers maximum safety value because of its greater strength and longer dependable service, assured by Plymouth's uniform, controlled quality ... For safety's sake -specify Plymouth Manila Rope.



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Pressure from local merchants who were losing business to out-of-state merchants has caused thirteen of these twenty-two sales tax states to pass what are known as Use Taxes. The general idea of the use tax is to compensate so that any item which would pay sales tax if bought locally must pay use tax if bought out of the state.

Responsibility for collection and payment into state funds of the sales tax in all states falls on the retailer, who in most cases is not only required to add the tax and collect it, but is prohibited from advertising in any way that he is absorbing the tax. The user in all cases is responsible for reporting and paying the use tax.

Because the Use Tax applies only to items which cross a state line, there is a tendency to think of this as a tax on interstate commerce which is prohibited by the Constitution. There have been cases decided both ways. One State Supreme Court decided it was an excise tax, not a property tax, and therefore the Constitutional provisions did not apply. A Federal District Court decided that railroad supplies and equipment used indiscriminately for both interstate and intrastate commerce could not be taxed. The United States Supreme Court held that machinery brought into a state, even though it was to be used on a federal project, was subject to the tax after it came to rest in the state. Thus it seems that use tax laws, if properly drawn, can be made to apply to articles which definitely come to rest in a

In Missouri, a manufacturer can only buy tax free the ingredients which become a part of the ultimate product. He must pay a tax on the items which are consumed in the process of manufacture, such as coal, lubricants, machinery, etc., but in Ohio anything used in the factory, unless it becomes a part of the building by permanent attachment, is tax free. In Ohio, freight and transportation charges are free of tax, but in Missouri goods sold delivered are taxed on total sales price, unless the freight

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is billed as a separate item. In Missouri, cash discounts are deductible from sales price in computing the tax, but in Ohio cash discounts cannot be deducted unless paid at time of sale. In Missouri, finance and carrying charges are exempt if shown separately on the invoice, but Ohio has no similar regulation, so seemingly such items are taxable.

In Missouri, if the printer furnishes the paper the total cost of printing is taxed, but if the buyer furnishes the paper the printer's charge is not taxable. Ohio rules that where the consumer furnishes materials, either directly or indirectly, the total cost of manufacture is taxable, but specifically exempts from taxation printed advertising matter used by a manufacturer to promote retail sales.

About two-thirds of the sales tax laws exempt sales for charitable and religious purposes. Alabama exempts retail sales if made in carload lots. About half the states exempt staple food, provided it is not eaten on the premises where sold. Time does not permit discussing all the differences between these state laws.

Where does all this fit in a busy purchasing agent's life?

Every purchasing agent should know what states have sales and use taxes. Perhaps he can buy to advantage in a non-tax state. He should study his own state law to avoid the tax as much as possible. He should question whether the goods he is buying are going to be used for a purpose which makes them taxable. A good example of this is gasoline used on tractors, lighting and pumping systems on farms. Nearly all our gasoline taxes are for the purpose of building and maintaining good roads, and in Missouri the tax only applies on gasoline used in vehicles which use the roads. Since these sales taxes apply principally to tangible property the Purchasing Agent may make considerable saving by buying material separate from the service or by having the supplier bill such items as labor, freight, financing charges and carrying charges separately. I hope this

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Government and Business Policies

(Continued from page 45)

The outstanding problem facing the nation today can be stated succinctly as "The relation of government to industry." It is essential for our future that there be a frank recognition that business and government are partners in a common enterprise and not adversaries. If approached in a spirit of reason our problems can be easily resolved to our mutual benefit. The underlying cause of the conditions existing in business today is the destruction of confidence brought about by unsound, vacillating and inconsistent government policies.

As to what these policies should be, I cannot improve upon the statement made in Industry's Platform for 1938, as adopted by the Congress of American Industry in December, when industry went on record as follows:

SOUND GOVERNMENT POLICIES

Government policies should establish and maintain conditions in which trade and commerce can be conducted most successfully by private enterprise in the interest of the public. The public needs government policies which will aid business and calls upon the government for cooperation to this end.

American industry renews its pledge of cooperation in the furtherance of measures which will promote the best interests of the American people.

American manufacturing is prosperous only when it produces and sells goods, providing jobs for workers. It sees the road to greater production and employment in improving old and developing new products, in attracting private capital for both operations and improvements, and by cooperation between employers and employees.

But manufacturers find "road closed" signs erected at many points. They may be summarized as—

- (a) Legislation which reduces incentive to invest funds, especially in the durable goods and construction industries. Increased flow of capital investment into private enterprise is essential to expand production and employment.
- (b) Continued uncertainty involving Federal regulation of industry beyond the field of necessary public safeguards.
- (c) Policies which have the effect of redistributing existing wealth and income instead of endeavoring to produce more national wealth and income. Constantly increased individual welfare has for over 100 years been the result of private industry producing more for distribution to all.
- (d) Taxes which are unduly burdensome both in amount and character; which make no allowance for previous losses when taxing profits and discriminate against companies with widely fluctuating earnings; which penalize companies burdened with debts; which restrict the amounts spent for plant expansion and improvement.
- (e) Continued unbalanced federal budget caused by excessive government spending.
- (f) Legislation which stimulates labor controversies or the threat of such controversies; which does not protect employees against any and all coercion; which is unfair to employers and under which only they can be held guilty of "unfair practices."
- (g) Tariff policies which increase imports of foreign goods competing with domestic industry and labor, by extending the benefits of reciprocal tariff provisions to those not parties to the agreements, giving the benefits and getting nothing in return. Adequate tariff protection is vital to American labor; American manufacturers offer their cooperation in the endeavor to secure such protection.
- (h) Increasing government competition with private enterprise.
- (i) Increasing centralization of economic and legislative power in the hands of the federal government.



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FACTORIES AT: Dayton, Cleveland, Beloit, Buffalo American industry seeks the cooperation of all citizens in removing these "stop" signals; unless they are removed the American standard of living will be reduced and a century trend of improved living standards reversed.

Industrial freedom cannot exist without political freedom. Political freedom does not and cannot exist where, as in some foreign countries, there are personal dictators; where minorities have no constitutional rights; where all private acts are subject to government dictation.

American industry opposes Fascism, Communism or government collectivism in any of its forms.

If the policies which I have just outlined should be adopted we could look forward to an immediate upturn in business activity. For lack of confidence is at the root of our troubles of today and confidence can and will be restored if government and business will again assume their proper roles. A small amount of pump priming might help. But only through a return to the good American system of private enterprise, properly safeguarded, can we hope for lasting prosperity.

Recent Regulations on Purchasing

(Continued from page 44)

300, that there is no violation of the Sherman Anti-Trust Act where the defendent manufacturer-producer specifies terms at which his products may be resold and refuses to deal with persons who fail to maintain such prices. A manufacturer does not violate the Sherman Act by refusing to sell to others who will not maintain prices which he fixes for their resale. Wholesalers, however, may not group together, nor may manufacturers and wholesalers organize a combination to maintain prices.

The Miller-Tydings Act legalizes vertical price maintenance contracts, but does not authorize or legalize horizontal price maintenance contracts. Purchasing representatives of retail sales agencies or wholesale agencies may negotiate so-called "fair trade" contracts for the maintenance of prices, but if they attempt to freeze the prices of a considerable number of ordinarily

competing commodities, they may discover that they have left the protection of the Miller-Tydings Act and have violated the Sherman Act.

The Miller-Tydings Act does not make price maintenance contracts valid all over the United States. Its effect is only to remove the threat of federal prosecution for violation of the Sherman Act or the Trade Commission Act or the amendments thereto, where state statutes have made the so-called "fair trade" contract or "price maintenance" contract lawful under the state laws. Some forty-two states now have such statutes.

The Robinson-Patman Anti-Price-Discrimination Act prohibits discrimination in price, services, or facilities as among purchasers, but the statute includes a provision that differentials are permissible if they "make only due allowances for differences in the cost of manufacture, sale, or delivery resulting from the different methods or quantities in which such commodities are, to such purchasers, sold or delivered." As purchasing representatives, you are naturally seeking more favorable prices and services. Each of you is in competition with other purchasing managers in the same field for special concession and considerations. The Robinson-Patman Act is, therefore, a particular pitfall

The Supreme Court has not yet reviewed this statute and, as is always the case in American law, we will not know its exact meaning and significance until we have had authoritative, judicial interpretation. It would appear, however, that if a quantity of goods is sold to customer A at a given price, with an agreement to hold him harmless against price decline, and a similar quantity of goods is sold to customer B at the same price, without such an agreement to hold harmless, the customer receiving the obligation insuring him against loss has received a discriminatory advantage and, perhaps, is a party to a violation of the Robinson-Patman Act. It is also argued that if a manufacturer sells to customers in one state, entering into a Miller-Tydings con-



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tract with them so that there will be a maintained retail price in that state, he is discriminating against purchasers in other states if he refuses to enter into a Miller-Tydings or fair trade contract with them.

Government's Program

(Continued from page 41)

still have a Walsh-Healey Law, and its functions are steadily being extended. More and more industries are covered by it.

Purchasing Agents, I am assured by your Executive Secretary, are the most virtuous of all businessmen. Anything that savors of collusion, of agreements on prices, is abhorrent to them. I'm glad of that because it's my duty to warn you that the "Government'll get you if you don't watch out." In other words, there is nothing that disturbs the Administration like identical bidding and trade associations that are over-zealous in exchanging price schedules and perhaps in price-fixing. Dozens of groups, big and little, are now under the Federal Trade Commission ban.

But the Government isn't willing to wait for the slow processes of the Federal Trade Commission and the still slower action of the Department of Justice. It made, as you know, a direct drive at cement prices by demanding bids on an f.o.b. mill basis. This was a move to end identical bidding and the basing-price system. If that is successful, and the Government gets more diversified bids and bids more satisfactory to them, it will drive against other industries, notably I think, steel. They've already hit at rubber tires.

In the current Government talk about prices, you will hear constant repetition of two phrases, "rigid prices" and "sensitive prices." By the former, the Administration economists mean prices which are controlled by industry. They would put in that list most finished manufactured and semiprocessed goods. In the latter, raw materials including farm products and nonferrous metals and some manufactured

goods of low prices, produced by great number of units. Some forms of low-priced cotton textiles are an example. The line between the two is not always very clear, but these same economists have a vague idea that rigid prices ought to be more readily responsive to general conditions than they are; that shoe prices, for instance, ought to shift more quickly with the price of leather than they do.

Anything in the nature of a general revision of the Anti-Trust Act is a long way off. There are plenty of men—lawyers of standing both in Government and out—who will tell you that the laws are adequate as they stand; that the real need is intelligent and earnest efforts at enforcement.

There's another law put on the statute books this session that may add to the problems of business. That's the one amending the Federal Trade Commission Law so that the Commission may proceed against acts that are merely "deceptive" without proving that the acts were unfair in competition.

So far, the Commission has not gone after a single company on the sole allegation that its conduct was "deceptive." The Commission does not wish to invoke that power unless it can find no other way out. It is a great power the Commission has and no matter how gentle the Commission may be in exercising it, the power is there.

That is what is disturbing in the Government today. A law that says no man may pay a worker less than 25¢ an hour seems mild. Surely any worker ought to be worth that. But suppose the whole power of agreement between employer and employed is taken away from the individuals concerned and put in the hands of the Government? If we fix all wages and hours, then we must needs fix all prices and the businessman becomes a mere automaton. The railroads are in that position today. Other industries may soon be. There I think lies our greatest danger-the increasing surrender of the individual and of industry to the control of Government.

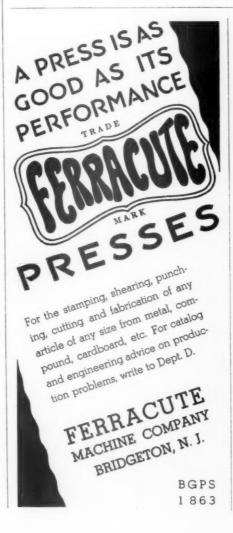


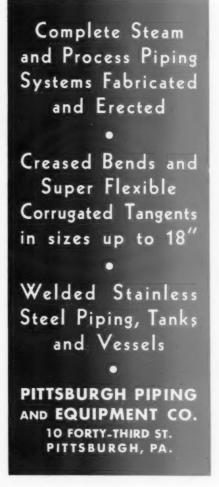
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NEW PRODUCTS & IDEAS



BARREL CRADLE

No. 595

FOR HANDLING BARRELS or drums up to 600 pounds in weight, and bringing them into position for pouring, this new device has been developed. It consists of two triangular sections as shown, with hinged connection and a crank and tie-rod that controls the tilting of the upper section. A drum is brought into position and tilted to lie on the upper section. By means of the crank it can now be brought to horizontal position for pouring, as shown at the right of the illustration. The assembly is durably constructed of structural steel parts, and is equipped with rollers that permit its being taken from one location to another, the rollers being out of operating position when the cradle is in use.

Use coupon below



HAND HOIST

PURCHASING

PAGE 64

No. 596

THIS NEW LEVER-OPERATED hoist is suitable for lifting or for horizontal pulling of loads, can be used in any position, and holds the load at any point. The ratchet movement can be operated through a minimum arc of 30 degrees or through a full circle, and the lever telescopes to a short length for use in close quarters. The load chain consists of electrically welded, carbon steel, heat-treated links. Standard hook movement is five feet, but additional length of chain can be provided. There are two

models. The smaller has a rating of $^3/_4$ -ton, weighs 20 pounds, and has a minimum distance of $8^3/_4$ inches between hooks. The larger model has a rating of $1^1/_2$ tons, weighs 32 pounds, and has a minimum distance of $16^3/_4$ inches between hooks.

Use coupon below

MICROMETER DIAL GAGE



No. 597

DIRECT READINGS IN 64ths of an inch make this measuring device particularly useful in picking out drills, reamers, taps, etc., for measuring round or flat stock and odd-shaped parts, and for checking sizes of work in process and finished products where no finer measure of accuracy is required. The plunger is set to dimension by means of a knurled wheel in the upper edge of the housing, which brings the two anvils in contact with the work. A slot in the side of the housing is marked off in three positions, for 16ths, 32nds, and 64ths of an inch, and numbers appear in this slot to indicate the measurement. Even 8ths and quarters appear in a circular opening at the end of the slot. The maximum measuring capacity is 1 inch.

Use coupon at left

FLEXIBLE TUBING





MADE OF A FLEXIBLE SYNTHETIC resin which is inert to gasoline, oils, and organic solvents, and which retains its flexibility throughout a wide temperature range, this patented tubing has many commercial applications in the fuel and brake lines and lubrication systems of automotive equipment, Diesel engines, and aircraft; in the conveying of solvents and mineral and vegetable oils in chemical and process industries; in hydraulic lines; and in fuel and oil handling equipment. It is extremely light in weight, tough, resistant to pressure, and may literally be tied in knots. Under normal conditions of use over

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long periods it shows no fatigue or deterioration. At the present time it is available in sizes up to $^{1}/_{2}$ -inch inside diameter, but larger sizes of tubing, as well as sheet material, gaskets, washers, and packing are scheduled for early production.

Use coupon page 64

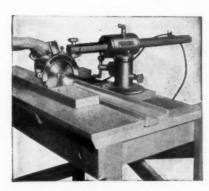


FACTORY PHONE BOOTHS

No. 599

FOR IMPROVED TELEPHONE SERVICE in moderately noisy locations where space is limited, these two new types of acoustic booths have been developed for application to a wall or pillar or resting on a bench or desk. The principle utilized in this equipment is not the exclusion of extraneous noises, but their absorption so as to prevent interference with the telephone user. This is accomplished by a special lining of perforated metal backed by a soft sound absorbent material which has proved highly successful in coping with such disturbances as normal factory noises, as well as in engine mufflers, air ducts, airplane cabins, truck cabs, and the like. Both units are made of steel and require no servicing. The wall-type booth has a built-in electric light and a shelf.

Use coupon page 64



PORTABLE SAWING MACHINE

No. 600

A RADIAL SLIDING ARM IS provided to convert this portable sawing equipment for use as a universal sawing machine. The arm is mounted on a saw table measuring 17×41 inches, and requiring floor space 31×44 inches. Length of arm stroke is 26 inches. The supporting column can be swung to any position to the right or left, and the saw can be tilted to any angle from square with the surface of the work to 45 degrees, for mitering or beveling. The bracket between arm and saw turns so as to permit ripping, ploughing or grooving. Three standard saws are available, cutting to respective depths of $3^3/_4$, 3, and $2^{11}/_{16}$ inches. The saw blades can also be replaced with dado heads or with abrasive wheels for cutting marble, slate, or composition.



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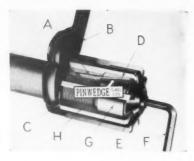
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Blades





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No. 601

THIS NEW EXPANSION REAMER is available in chucking (straight or taper shank) or shell design, in sizes up to 3 inches. The blades fit into milled slots in the reamer body, the bottom of each blade being ground to correspond with the taper at the bottom of the slot. Lengthwise movement of the blades produces expansion or contraction of the reamer size, this being controlled by an adjusting collar fitted to a threaded portion of the reamer body and turned with a spanner wrench. Each blade is assembled with a Pinwedge lock. A round leg engages a limit screw in the body slot and a rectangular leg engages a full length groove in the blade, the angular relation between the two producing a wedging action which locks the blade in position.

Use coupon page 64

EXPANSION SHIELD

No. 602



FEATURING THE CONSTRUCTION of this new expansion shield is a nut made of high strength zinc alloy, rust-proof and free from electrolytic action in contact with the lead expansion sleeve in which it rides. The nut is made with a closed bottom, thus excluding dust and foreign matter which might clog the threads during expansion. It is made in a range of sizes for screws or bolts from $^3/_{16}$ to $^5/_8$ inch, standard threads, is cast with improved lugs that prevent the nut from turning, has a thread length permitting ample adjustment of screw length.

Use coupon page 64

PROCESS TIMER



No. 603

THIS NEW TIMER is adapted to a wide variety of applications in process control or time notification signals. It has large, legible 24-hour dial and a 1-hour dial cam. Two pointers connected with an electrical contact arm ride each dial. Segments are cut in the 24-hour dial at the periods during which the signal is to operate, and the 1-hour dial cam has slots at each 15-minute period. At each 15-minute period, the pointer drops

into the slot on the 1-hour dial, but cannot make a contact until the present time is reached on both dials, when contact is made, and the signal operates for a predetermined period. The time periods may be set at the factory, or, in another model, can be set or changed at any time. Signals can be set to operate from 1 to 15 seconds.

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No. 604

THIS NEW AND UNIQUE PENCIL is not mechanical in operation, and requires no refills, but consists of a solid graphite stick coated with Silverite metal which makes for cleanliness in handling and is suitable for imprinting for advertising or other use. It is sharpened in the usual manner by knife or pencil sharpener and has the unusual advantage that the points do not break off. It is well adapted for all home, office, and business uses. Available in two sizes— $5 \times \frac{5}{16}$ and $4^{1/4} \times \frac{3}{16}$ inches.

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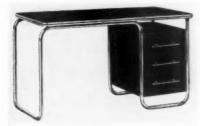


PORTABLE ELECTRIC SHEAR

No. 605

THE VERTICAL RECIPROCATING blade in this new portable shear operates at 1,500 strokes per minute under full load, in connection with a horizontal stationary blade carried in a semi-circular shoe. The tool cuts all types of sheet metal in straight or curved outline to a minimum radius of 3/4-inch. Operation of the standard model is on a.c. or d.c. at 110 volts, but it is also available for 220 or 250-volt operation. Two sizes have ratings for cutting steel to 18 and 16 gage. The net weights of these two units are 63/4 and 8 pounds.

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METAL DESK

No. 606

THE DESK ILLUSTRATED is typical of a new line of office furniture, modern in appearance, construction and functional design. This number, for secretarial use, is finished in chromium and black, or can be furnished in other colors or grained finishes to specification. The desk has a linoleum top measuring 24×24 inches, the linoleum being held in place by an aluminum band around the top, which adds to the decorative effect. It stands 27 inches high, and is equipped with three drawers.

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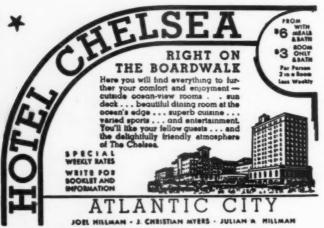
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Minimum Coal Prices Under the Act of 1937

(Continued from page 18)

This economic security we all seek is not going to be discovered in the printed words on a piece of paper, is not going to be found in a bank account or in a university degree, valuable as these all are. It is going to be found only when your neighbor is secure, and real happiness is only going to be found in the effort to assist your neighbor in his effort to obtain security. As long as we have to live in a society, call it the United States of America, or call it anything else, we cannot escape the obligations of that society and the first obligation—an obligation which has a very selfish purpose—is that of dealing fairly with your neighbor.

We have a distinct Consumer interest in the administration of the Bituminous Coal Act, and as it is our obligation and our opportunity to represent that interest in Washington, we are going to give everything we have to represent it fairly. We realize the interests of capital and the interests of labor will be represented by others. But we must represent that consumer interest with the understanding that it must merge into the broad public interest, that we must deal fairly with all parties in the effort to work toward the one common goal of making Democracy work.

Shortly after we took office, I had a visit from an old newspaper associate and friend. He has a national and an international reputation, and he is no friend of the present administration. He was writing on business and what he termed "government interference in private business." The Bituminous Coal Act seemed to him to present a fine opportunity to ridicule the efforts of government, a vivid example of the follies of government.

Gradually as we talked about the history of the bituminous coal industry he came to the admission that the old system of *laissez-faire* had not been successful in the bituminous coal industry and that some form of government control had to be exercised over and in behalf of this industry. He recognized that there was nothing but pure blather in the phrase that "price fixing cannot work" because he realized that we have had price fixing by some interest, some group of government, or some power inherent in some group of government, whether it was an officially organized group or not.

At that time I was bewildered and very much depressed by the seeming contradictions in the Act, by the lack of clarity, by the immensity of the government tent which had been erected here to house all the many rings of the circus. I could think in terms of an ideal goal and I wanted to rush forward to that goal only to be confronted by some provision of the Act.

Eight months have gone by and just the other day I had another visit from my newspaper friend. He is still doing research work in this field. He has learned much and he is a changed man, but he is still very, very pessimistic about the job we have before us.

"I can see two things possible," he said. "If the

Commission can develop facts concerning this industry which are so sadly lacking, a real foundation may be established for something better. And if the Commission can develop a strong administrative organization to handle a problem of regulation in this industry, the work will be justified."

His thoughts and his words then turned to the lack of clarity in the Act and to the questions I had raised eight months ago. In the eight months I had gotten an understanding that the ideal goal toward which I would have jumped could never have been reached in that way and that the very broad provisions of the Act might become a virtue instead of a vice. I had learned that there were communities of homes established throughout this country because of certain conditions and practices in the bituminous coal industry, that businesses had also been established in those communities, that investments had been made in plant and by both capital and labor, and that in jumping to the ideal goal, the result would be to destroy much of that which had been built. The job cannot be done in that way. It is a job which is going to require the utmost patience and to demand a policy of step-by-step, and the very broadness of the Act may give us room in which we can operate.

In the first steps we take, we must establish confidence in our effort and in our work, and confidence can only be established by taking the public completely into our confidence. That was why we opposed the last price order. The policy then pursued would have destroyed the Act. There must be no secrets, the cards must be played on top of the table. One of these days we are going to get rid of all secrecy in official matters of government because the public is going to get a complete understanding of what government really is and the public will demand a government of complete public record.

Very recently, the Supreme Court handed down a decision which is known as the "Morgan case." That decision supported every contention made by the Office of Consumers Counsel in the opposition we expressed to the establishment of minimum prices last Fall. Some of my lawyer friends are a bit afraid the Court in this decision has made it too difficult for administrative agencies of government to work and perhaps they are right. But the philosophy of government which runs through the decision pleased me greatly because the Court impressed on administrative agencies the responsibility of those agencies to the public and stressed the necessity of establishing public confidence in the work done by these agencies.

We have this Act. We cannot go back to the theory of so-called free and open competition in this industry, because that system failed. It became a system of no government, a system of industrial anarchy. Upon those who would think of destroying this Act, must fall the responsibility of providing something which would be better and which could be accomplished. My conviction is that regardless of all the difficulties within the Act and all the problems which will arise for those re-





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The New York Times

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sponsible for its administration, we must make every effort to make this Act work and in that effort must seek facts and ideas which will permit us to improve the Act and its administration.

Recent Chemical Developments

(Continued from page 39)

There have also been improvements in methods of manufacture, form, or purity of some of the well-known products. Improvements in resins have made possible a better safety glass. There has been a marked advance in welding. Synthetic resins are now available in molding powders ready for the press. White leather washable with soap and water is on the market. The use of synthetic resins has greatly improved the laminated woods. Phosphoric acid can now be had in tank cars of a purity which improves the quality of a whole line of products based upon it. The perfection of a molecular still not only gives us highly concentrated vitamin A but makes possible the separation of materials, the boiling points of which are very close together, and affords the market a line of commercially produced compounds many of which have long been wanted but were available only as laboratory curiosities.

The fight against rust, decay, and the inroads of insects and fungi goes on continuously. Improvements in electroplating, in alloys, the new insecticides, fungicides, and germicides, chemical compounds to prevent stains in wood, transparent wrapping materials that are flame-proof—all these and others are typical of such improvements.

Methods of speeding production and of reducing the area required for a given output may also be mentioned.

The contributions of the chemical to other industries may be expected to continue in increasing rather than decreasing number. It can be shown that during times of economic stress research activities are accelerated and multiplied rather than curtailed. During what we are pleased to call normal times the principal effort goes into the problems of production and distribution. When these are lessened there are time and effort to complete some of the work on newer things and there is always the greater urge to put new and improved materials into production for the sake of stimulating trade.

Coupled with this is the ever-present urge to make more perfect goods which, while acceptable, quite obviously could be made better. There is the realization that man is never quite satisfied but always hoping for additional items to enjoy, and finally there is the continuing curiosity on the part of the scientist to learn of what and how things are made and why they behave as they do. The combined forces of these factors of themselves are sufficient to keep research moving forward and to make it attractive to all industry to apply the results as rapidly as they have been proved sound and usable.

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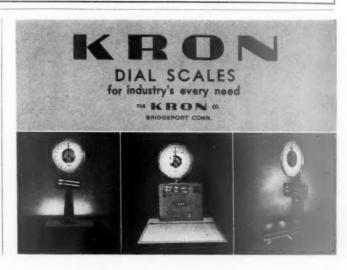
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